

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

C Number: C61234A

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Female

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_358

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Liver

Lung

Mammary gland

Spleen

Unspecified

Retina

Cortical Adenoma

Cataract

Degeneration, Nos

Cast, Nos

Inflammation, Chronic

Focal Cellular Change

Inflammation, Chronic

Dilatation, Ducts

Fibroadenoma

Hemosiderosis

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_359

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|--|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Eye | Retina | Cataract Degeneration, Nos |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma Galactocele |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute/Chronic Ulcer, Acute |
| Thyroid | | C-Cell Adenoma C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_360

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Tubular-Cell Adenocarcinoma

Inflammation, Acute

Metamorphosis, Fatty

Necrosis, Coagulative

Squamous Cell Carcinoma, Invasive

Lung

Inflammation, Chronic

Pituitary gland

Adenoma, Nos

Stomach

Squamous Cell Carcinoma

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_361

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_362

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver
Lung
Lymph node

Mandibular Lymph Node

Pigmentation, Nos
Hepatitis, Toxic
Inflammation, Acute/Chronic

Stomach
Thyroid

Mesenteric Lymph Node

Hyperplasia, Plasma Cell
Pigmentation, Nos

Unspecified

Multiple Organs Nos

Hyperkeratosis
C-Cell Carcinoma
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_363

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Inflammation, Chronic

Pigmentation, Nos

Lymph node

Mediastinal Lymph Node

Hemorrhage

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Hypertrophy, Focal

Skin

Eyelid Nos

Squamous Cell Carcinoma

Spleen

Hemosiderosis

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

C-Cell Carcinoma, Metastatic

Flank

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_364

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Unspecified

Neck

Fibrous Histiocytoma, Malignant

Diaphragm Nos

Hernia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_365

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-----------------------|----------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Interstitial |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Parovarian |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Spleen | | Hemangiosarcoma |
| Thyroid | | Follicular-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_366

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Mineralization
Pigmentation, Nos

Liver
Unspecified

Multiple Organs Nos

Hepatitis, Toxic
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_367

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Cervical Lymph Node Nos

Hyperplasia, Plasma Cell

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Hyperplasia, Plasma Cell

Mandibular Lymph Node

Lymphangiectasis

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_368

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Acanthosis |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_369

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lung

Mammary gland

Thyroid

Unspecified

Multiple Organs Nos

Pheochromocytoma

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Inflammation, Acute Focal

Adenocarcinoma, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_370

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Adenoma, Nos |
| | | Dilatation, Ducts |
| | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Angiectasis |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_371

TRT#: 1
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|---------------------|-----------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_372

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Skin | Ear | Keratoacanthoma |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_373

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|-----------------|-----------------------|
| Liver | Focal Cellular Change |
| Lung | Inflammation, Chronic |
| Pituitary gland | Adenoma, Nos |
| Spleen | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_374

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Lymphangiectasis |
| Mammary gland | | Fibroadenoma |
| Pancreas | | Acinar-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_375

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Pigmentation, Nos

Focal Cellular Change

Hepatocellular Carcinoma

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_376

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|-------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Astrocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| | | Hypertrophy, Focal |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Adenoma |
| | | Follicular-Cell Adenoma |
| Uterus | Broad Ligament | Fibrosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_377

TRT#: 1

DOSE: 0

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney
Liver
Mammary gland
Stomach

Mineralization
Hepatitis, Toxic
Fibroadenoma
Acanthosis
Inflammation, Chronic
Ulcer, Acute
C-Cell Carcinoma
Leukemia, Monocytic

Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_378

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Pituitary gland

Unspecified

Zymbal gland

Lower Leg Nos

Multiple Organs Nos

Mineralization

Metamorphosis, Fatty

Adenoma, Nos

Osteosarcoma

Osteosarcoma, Metastatic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_379

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_380

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Heart

Myocardium Nos

Metamorphosis, Fatty

Kidney

Fibrosis

Inflammation, Chronic

Lung

Mineralization

Lymph node

Mandibular Lymph Node

Inflammation, Chronic

Mammary gland

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Pigmentation, Nos

Adenoma, Nos

Dilatation, Ducts

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

C-Cell Adenoma

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_381

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|-----------------|-----------------------|
| Heart | Inflammation, Chronic |
| Kidney | Cast, Nos |
| | Inflammation, Chronic |
| Pituitary gland | Adenoma, Nos |
| Spleen | Hemosiderosis |
| Thyroid | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_382

TRT#: 1
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| Brain | Cerebrum | Astrocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Inflammation, Acute/Chronic |
| Lung | | Congestion, Nos |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Galactocele |
| Skin | Nose | Squamous Cell Papilloma |
| Spleen | | Hemosiderosis |
| Uterus | | Endometrial Stromal Polyp |
| Zymbal gland | | Dilatation, Ducts |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_383

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Spleen

Thyroid

Unspecified

Thoracolumbar Region

Cast, Nos

Metamorphosis, Fatty

Inflammation, Chronic

Hematopoiesis

C-Cell Carcinoma

Osteosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_384

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Pituitary gland

Spleen

Thyroid

Cast, Nos

Inflammation, Chronic

Metamorphosis, Fatty

Galactocele

Hyperplasia, Nos

Adenoma, Nos

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_385

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Spleen

Hematopoiesis

Unspecified

Diaphragm Nos

Hernia, Nos

Nose

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_386

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Chronic |
| | | Ulcer, Perforated |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_387

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|--------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| | | Angiectasis |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Hyperplasia, Cystic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_388

TRT#: 1
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Femur | Osteosarcoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lung | | Congestion, Nos |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_389

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Thyroid

Unspecified

Retina

Myocardium Nos

Mediastinal Lymph Node

Multiple Organs Nos

Cortical Adenoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Hepatitis, Toxic

Neoplastic Nodule

Pigmentation, Nos

Cystic Ducts

Fibroadenoma

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_390

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Unspecified

Abdominal Cavity

Mineralization

Angiectasis

Focal Cellular Change

Inflammation, Chronic

Fibroadenoma

Adenoma, Nos

Leiomyosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_391

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Skull | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Pancreas | | Acinar-Cell Adenoma |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | | Fibroma |
| Uterus | | Endometrial Stromal Polyp |
| | | Inflammation, Acute |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_392

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Lung

Congestion, Nos

Mammary gland

Hemorrhage

Spleen

Adenocarcinoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_393

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Lipoma |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hematopoiesis |
| | | Inflammation, Granulomatous |
| Mammary gland | | Dilatation, Ducts |
| | | Fibroadenoma |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_394

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| | | Hemorrhage |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Small | Duodenum | Leiomyoma |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | | Fibroma |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_395

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Neoplastic Nodule |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_396

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|----------------------------|
| Bone | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lung | | Inflammation, Interstitial |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Hyperkeratosis |
| | | Inflammation, Chronic |
| Thyroid | | Cystic Follicles |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_397

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Focal Cellular Change
Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Pituitary gland

Galactocele

Spleen

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_398

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Carcinoma, Nos, Invasive |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Tongue | | Squamous Cell Papilloma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_399

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | |
|---------------|-----------------------|
| Liver | Focal Cellular Change |
| | Inflammation, Chronic |
| Mammary gland | Fibroadenoma |
| Spleen | Hemosiderosis |
| Thyroid | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_400

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Mammary gland | | Fibroadenoma |
| Ovary | | Granulosa-Cell Tumor |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Carcinoma |
| Unspecified | Flank | Fibrosarcoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_401

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland

Kidney

Liver

Lung

Lymph node

Mammary gland

Pancreas

Pituitary gland

Thyroid

Unspecified

Ileocolic Lymph Node

Mesenteric Lymph Node

Multiple Organs Nos

Squamous Cell Carcinoma

Cast, Nos

Inflammation, Chronic

Metamorphosis, Fatty

Inflammation, Chronic

Lymphangiectasis

Lymphangiectasis

Fibroadenoma

Galactocele

Atrophy, Nos

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_402

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|---------------------------|
| Bone | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_403

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Pancreas

Pituitary gland

Thyroid

Unspecified

Islets

Multiple Organs Nos

Pheochromocytoma

Mineralization

Pigmentation, Nos

Focal Cellular Change

Fibroadenoma

Islet-Cell Adenoma

Hypertrophy, Focal

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_404

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Spleen

Thyroid

Uterus

Mineralization

Focal Cellular Change

Inflammation, Chronic

Fibrosis

Hyperplasia, C Cell

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_405

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Liver

Mammary gland

Thyroid

Focal Cellular Change

Fibroadenoma

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_406

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Necrosis, Coagulative |
| Pituitary gland | | Angiectasis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_407

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|---------------------------|
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_408

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_409

TRT#: 1
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--|
| Adrenal gland | Cortex Nos | Angiectasis Pheochromocytoma |
| Eye | Retina | Cataract Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Mineralization Pigmentation, Nos |
| Liver | | Cyst, Nos Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma Follicular-Cell Adenoma |
| Uterus | | Inflammation, Acute |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_410

TRT#: 1
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| Uterus | | Endometrial Stromal Sarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_411

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Fibrosis

Kidney

Mineralization

Liver

Hepatitis, Toxic

Lung

Inflammation, Interstitial

Mammary gland

Adenocarcinoma, Nos

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Inflammation, Acute

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_412

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Bone

Kidney

Skull

Pheochromocytoma

Hyperostosis

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Mammary gland

Hepatitis, Toxic

Adenoma, Nos

Galactocele

Pancreas

Pituitary gland

Stomach

Atrophy, Nos

Adenoma, Nos

Acanthosis

Submucosa

Edema, Nos

Inflammation, Acute/Chronic

Thyroid

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_413

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Congestion, Nos |
| Lymph node | Mandibular Lymph Node | Congestion, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Uterus | | Leiomyoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_414

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye
Kidney

Medulla
Retina

Hyperplasia, Focal
Degeneration, Nos
Cast, Nos
Inflammation, Chronic
Mineralization

Lymph node

Mediastinal Lymph Node
Mesenteric Lymph Node

Pigmentation, Nos
Pigmentation, Nos
Pigmentation, Nos

Mammary gland
Ovary

Fibroadenoma
Cyst, Parovarian

Spleen

Hemosiderosis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_415

TRT#: 1
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Carcinoma, Nos |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Chronic |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Leiomyoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_416

TRT#: 1

DOSE: 0

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Pituitary gland

Hyperplasia, Focal

Thyroid

C-Cell Adenoma

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_417

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|------------|------------------------|----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| Ovary | | Cyst, Parovarian |
| Spleen | | Hematopoiesis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_418

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Lung

Fibrous Histiocytoma, Metastatic

Hyperplasia, Alveolar Epithelium

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Adenoma

Unspecified

Flank

Follicular-Cell Adenoma

Fibrous Histiocytoma, Malignant

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_419

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Pituitary gland

Thyroid

Unspecified

Myocardium Nos

Multiple Organs Nos

Congestion, Nos

Fibrosis

Mineralization

Angiectasis

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_420

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Angiectasis |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Adenoma, Nos |
| Skin | Ear | Squamous Cell Papilloma |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_421

TRT#: 1
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Medulla

Hyperplasia, Nos
Cast, Nos
Inflammation, Chronic
Mineralization

Liver
Lymph node
Mammary gland

Mediastinal Lymph Node

Focal Cellular Change
Pigmentation, Nos
Adenocarcinoma, Nos
Fibroadenoma

Unspecified
Uterus

Multiple Organs Nos
Endometrium

Leukemia, Monocytic
Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_422

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Spleen

Pheochromocytoma, Malignant

Inflammation, Chronic

Mineralization

Focal Cellular Change

Pheochromocytoma, Metastatic

Dilatation, Ducts

Fibroadenoma

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_423

TRT#: 1
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal Pheochromocytoma |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Focal Cellular Change |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| Pancreas | Islets | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_424

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|-----------------------|
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_425

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Medulla

Hyperplasia, Focal

Cast, Nos

Mineralization

Pigmentation, Nos

Liver
Focal Cellular Change

Lung
Inflammation, Chronic

Mammary gland
Fibroadenoma

Pituitary gland
Adenoma, Nos

Unspecified
Leukemia, Monocytic

Uterus
Hyperplasia, Cystic

Multiple Organs Nos

Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_426

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Brain

Carcinoma, Nos, Invasive

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Inflammation, Granulomatous

Lymph node

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Dilatation, Ducts

Galactocele

Ovary

Cyst, Parovarian

Pituitary gland

Carcinoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_427

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Pheochromocytoma, Malignant
Cast, Nos
Inflammation, Chronic
Mineralization

Liver
Lung

Focal Cellular Change
Pheochromocytoma, Metastatic
Sarcoma, Nos, Metastatic

Mammary gland
Pituitary gland
Spleen
Thyroid
Unspecified

Fibroadenoma
Adenoma, Nos
Hematopoiesis
Hyperplasia, C Cell
Sarcoma, Nos

Head

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_428

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Liver
Lung
Mammary gland
Pituitary gland

Cortex Nos

Hypertrophy, Focal
Focal Cellular Change
Inflammation, Chronic
Fibroadenoma
Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:13
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_429

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|----------------|----------------|--------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Clitoral gland | | Dilatation, Ducts |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hemorrhage |
| | | Neoplastic Nodule |
| Lung | | Alveolar/Bronchiolar Carcinoma |
| Mammary gland | | Fibroadenoma |
| Stomach | | Inflammation, Acute/Chronic |
| | | Ulcer, Acute |
| Uterus | Endometrium | Hyperplasia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_430

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Dilatation, Ducts |
| | | Fibroadenoma |
| Pancreas | | Atrophy, Nos |
| | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_431

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney

Cortex Nos
Anus Nos

Metamorphosis, Fatty
Cyst, Epidermal Inclusion
Cast, Nos
Inflammation, Chronic
Pigmentation, Nos
Hepatitis, Toxic
Fibroadenoma
Follicular-Cell Adenoma
Fibroma
Leukemia, Monocytic

Liver
Mammary gland
Thyroid
Unspecified

Flank
Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_432

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|--------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pancreas | Peripancreatic Tissue | Hemangiosarcoma |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:13

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_434

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Retina

Myocardium Nos

Cortical Adenoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Cyst, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Fibroadenoma

Adenoma, Nos

Hemosiderosis

C-Cell Adenoma

Liver

Mammary gland

Pituitary gland

Spleen

Thyroid

Unspecified

Multiple Organs Nos

Abdominal Cavity

Abdominal Cavity

Leukemia, Monocytic

Necrosis, Fat

Steatitis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_435

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Mammary gland

Myocardium Nos

Degeneration, Nos

Fibrosis

Mineralization

Focal Cellular Change

Inflammation, Chronic

Dilatation, Ducts

Fibroadenoma

Hemosiderosis

Cystic Follicles

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_436

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Fibrosis, Focal |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_437

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|---------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Fibroadenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Skeletal muscle | | Inflammation, Chronic Focal |
| Skin | Nose | Squamous Cell Papilloma |
| Spleen | | Fibrosis |
| Stomach | | Cyst, Nos |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Cervix Uteri | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_438

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Mammary gland | | Dilatation, Ducts |
| Ovary | | Thecoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_439

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Infarct, Acute |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_440

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Thyroid

Unspecified

Uterus

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Hyperplasia, C Cell

Leukemia, Monocytic

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_441

TRT#: 1
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|--|
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Hepatitis, Toxic |
| Pancreas | Islets | Islet-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Stomach | Submucosa | Edema, Nos Ulcer, Acute |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_442

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Carcinoma, Nos, Invasive |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Pigmentation, Nos |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Hyperplasia, Lymphoid |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_443

TRT#: 1

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Mineralization

Focal Cellular Change

Inflammation, Chronic

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_444

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Medulla

Hyperplasia, Focal

Cast, Nos

Mineralization

Pigmentation, Nos

Focal Cellular Change

Liver

Lymph node

Mandibular Lymph Node

Pigmentation, Nos

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_445

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hypertrophy, Focal

Brain

Cortex Nos

Metamorphosis, Fatty

Kidney

Carcinoma, Nos, Invasive

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Pituitary gland

Carcinoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

Uterus

Endometrium

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_571

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Hepatitis, Toxic

Hyperplasia, Focal

Lung

Neoplastic Nodule

Inflammation, Chronic

Pituitary gland

Hypertrophy, Focal

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_572

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| | Transverse Colon, Colon | Adenomatous Polyp, Nos |
| | Cecum, Colon | Inflammation, Acute |
| | Ascending Colon, Colon | Mucinous Cystadenocarcinoma |
| | Colon | Parasitism |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_573

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland

Kidney

Liver

Lymph node

Mediastinal Lymph Node

Mediastinal Lymph Node

Mediastinal Lymph Node

Spleen

Thyroid

Carcinoma, Nos

Mineralization

Focal Cellular Change

Hemorrhage

Hyperplasia, Plasma Cell

Pigmentation, Nos

Hematopoiesis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_574

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|-----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Kidney | | Cast, Nos |
| | | Mixed Tumor, Malignant |
| Liver | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_575

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|--------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Clitoral gland | | Carcinoma, Nos |
| Intestine Large | Transverse Colon, Colon | Adenomatous Polyp, Nos |
| Kidney | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lymph node | Iliac Lymph Node | Hyperplasia, Focal |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Pigmentation, Nos |
| Pituitary gland | | Galactocele |
| | | Angiectasis |
| Thyroid | | Hyperplasia, Focal |
| Unspecified | Multiple Organs Nos | C-Cell Adenoma |
| | | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_576

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenomatous Polyp, Nos

Kidney

Transverse Colon, Colon

Parasitism

Liver

Mineralization

Mixed Tumor, Malignant

Lung

Focal Cellular Change

Hyperplasia, Nos

Lymph node

Inflammation, Granulomatous

Inflammation, Chronic

Mammary gland

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Thyroid

Fibroadenoma

Cystic Follicles

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_577

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Lymph node

Unspecified

Mediastinal Lymph Node

Multiple Organs Nos

Mineralization

Pigmentation, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_578

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney
Liver

Cortex Nos
Cecum, Colon

Metamorphosis, Fatty
Adenocarcinoma, Nos
Mineralization
Hepatocellular Carcinoma
Metamorphosis, Fatty
Hyperkeratosis
Adenocarcinoma, Nos, Metastatic

Stomach
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_579

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lymph node

Mandibular Lymph Node

Focal Cellular Change

Mammary gland

Metamorphosis, Fatty

Pituitary gland

Congestion, Nos

Stomach

Fibroadenoma

Adenoma, Nos

Inflammation, Acute/Chronic

Ulcer, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_580

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenocarcinoma In Adenomatous Polyp
Cast, Nos
Mineralization

Liver
Lymph node
Mammary gland

Mediastinal Lymph Node

Focal Cellular Change
Pigmentation, Nos
Galactocele

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_581

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Small
Kidney
Liver

Cortex Nos
Myocardium Nos
Duodenum

Lung
Lymph node

Mandibular Lymph Node
Mediastinal Lymph Node

Mammary gland
Thyroid
Unspecified

Multiple Organs Nos

Metamorphosis, Fatty
Fibrosis
Mucinous Cystadenocarcinoma
Mineralization
Angiectasis
Focal Cellular Change
Inflammation, Chronic
Hyperplasia, Plasma Cell
Pigmentation, Nos
Fibroadenoma
Hyperplasia, C Cell
Fibroma
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_582

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver
Thyroid
Unspecified

Cortex Nos

Multiple Organs Nos
Adipose Tissue

Metamorphosis, Fatty
Mineralization
Hepatitis, Toxic
Hyperplasia, C Cell
Leukemia, Mononuclear Cell
Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_583

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Lymph node

Uterus

Mediastinal Lymph Node

Mineralization

Necrosis, Coagulative

Congestion, Nos

Congestion, Nos

Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_584

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|----------------|-----------------------|-----------------------------|
| Clitoral gland | | Inflammation, Acute/Chronic |
| Kidney | | Mineralization |
| Liver | | Cyst, Nos |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Parovarian | Steatitis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_585

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney

Cortex Nos
Colon

Metamorphosis, Fatty
Parasitism
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Mammary gland
Pituitary gland
Spleen
Thyroid
Unspecified
Zymbal gland

Focal Cellular Change
Hepatitis, Toxic
Hyperplasia, Focal
Fibroadenoma
Adenoma, Nos
Fibrosis
Hyperplasia, C Cell
Leukemia, Monocytic
Squamous Cell Papilloma

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_586

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|-----------------------|--------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Metamorphosis, Fatty |
| Lung | | Leukocytosis, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Spleen | | Hematopoiesis |
| Thyroid | | Cystic Follicles |
| Unspecified | Multiple Organs Nos | Congestion, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_587

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|----------------------------|
| Bone | Sternum | Hyperplasia, Hematopoietic |
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_588

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney

Medulla
Descending, Colon

Hyperplasia, Focal
Adenomatous Polyp, Nos
Cast, Nos
Mineralization
Mixed Tumor, Malignant
Hepatitis, Toxic
Hyperplasia, Alveolar Epithelium
Adenoma, Nos
Follicular-Cell Carcinoma
Leukemia, Monocytic

Liver
Lung
Pituitary gland
Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_589

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------|
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| Mammary gland | | Galactocele |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_590

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Colon

Parasitism
Mineralization
Focal Cellular Change
Hepatitis, Toxic

Mammary gland

Fibroadenoma
Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Cervix Uteri

Hyperplasia, Stromal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_591

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Thyroid

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Hepatocellular Carcinoma

Inflammation, Chronic

Fibroadenoma

Angiectasis

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_592

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Hepatocellular Carcinoma |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_593

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Heart

Kidney

Liver

Lymph node

Unspecified

Uterus

Myocardium Nos

Mediastinal Lymph Node

Multiple Organs Nos

Abdominal Cavity

Pheochromocytoma

Carcinoma, Nos

Fibrosis

Mineralization

Hepatocellular Carcinoma

Pigmentation, Nos

Leukemia, Monocytic

Steatitis

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_594

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Ascending Colon, Colon

Mucinous Cystadenocarcinoma
Cast, Nos
Mineralization

Liver

Focal Cellular Change

Thyroid

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_595

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Transverse Colon, Colon

Adenomatous Polyp, Nos
Mineralization
Focal Cellular Change
Hepatitis, Toxic
Hyperplasia, Focal
Hypertrophy, Focal
Follicular-Cell Adenoma
Hyperplasia, C Cell
Leukemia, Monocytic

Pituitary gland
Thyroid

Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_596

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------------|
| Kidney | | Mineralization |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Cyst, Nos |
| Spleen | | Hemosiderosis |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_597

TRT#: 2

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|---------------|-----------------------|
| Liver | Focal Cellular Change |
| Lung | Inflammation, Chronic |
| Mammary gland | Fibroadenoma |
| Spleen | Hemosiderosis |
| Thyroid | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_598

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| | Descending, Colon | Parasitism |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Hyperplasia, Focal |
| Thyroid | | Follicular-Cell Adenoma |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_599

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Mammary gland

Thyroid

Unspecified

Myocardium Nos

Multiple Organs Nos

Degeneration, Lipoid

Fibrosis

Cast, Nos

Mineralization

Hepatitis, Toxic

Hyperplasia, Focal

Inflammation, Interstitial

Galactocele

Follicular-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_600

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

Thyroid

Hyperplasia, C Cell

Unspecified

Diaphragm Nos

Hernia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_601

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|---------------------|---------------------------|
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Pigmentation, Nos |
| Thyroid | | Follicular-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_602

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Pigmentation, Nos

Pituitary gland

Angiectasis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_603

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver
Pituitary gland
Unspecified

Cecum, Colon

Multiple Organs Nos

Mucinous Cystadenocarcinoma
Mixed Tumor, Malignant
Necrosis, Coagulative
Adenoma, Nos
Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_604

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------------|---|
| Intestine Large | Descending, Colon Colon | Adenomatous Polyp, Nos Parasitism |
| Kidney | | Cast, Nos Mineralization |
| Liver | | Hepatitis, Toxic Hyperplasia, Focal Neoplastic Nodule |
| Lung | | Inflammation, Acute/Chronic |
| Spleen | | Fibrosis, Focal |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Cervix Uteri Cervix Uteri | Hyperplasia, Stromal Inflammation, Granulomatous |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_605

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|------------|-------------------------|---------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Focal Cellular Change |
| Lymph node | Cervical Lymph Node Nos | Hemorrhage |
| | Mandibular Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_606

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Necrosis, Coagulative

Lung

Congestion, Nos

Unspecified

Multiple Organs Nos

Sarcoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_607

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Cecum, Colon

Mucinous Cystadenocarcinoma
Mineralization
Inflammation, Chronic
Necrosis, Coagulative

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_608

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Heart
Intestine Large
Kidney

Myocardium Nos
Colon

Fibrosis
Parasitism
Cast, Nos
Inflammation, Chronic
Mineralization
Focal Cellular Change
Hepatitis, Toxic
Galactocele
Leukemia, Monocytic

Liver

Mammary gland
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_609

TRT#: 2

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Metamorphosis, Fatty

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_610

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|----------------------------|
| Kidney | | Carcinosarcoma |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Spleen | | Hematopoiesis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Carcinosarcoma, Metastatic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_611

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Mineralization
Pigmentation, Nos

Liver
Pituitary gland
Unspecified

Multiple Organs Nos

Hepatitis, Toxic
Adenoma, Nos
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_612

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Pituitary gland

Adenoma, Nos

Unspecified

Neck

Fibrosarcoma

Uterus

Endometrium

Hyperplasia, Nos

Cervix Uteri

Hyperplasia, Stromal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_613

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|---|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Kidney | | Cast, Nos Mineralization |
| Liver | | Mixed Tumor, Malignant Focal Cellular Change Hepatocellular Carcinoma |
| Spleen | | Fibrosis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_614

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver
Mammary gland
Pituitary gland
Spleen
Thyroid

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos
Inflammation, Granulomatous
Hyperplasia, Nos
Angiectasis
Hemosiderosis
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_615

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|---------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Transverse Colon, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Pigmentation, Nos |
| | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Adenoma |
| | | Hyperplasia, C Cell |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_616

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney
Liver

Mineralization
Fibrosis, Focal
Focal Cellular Change
Hepatitis, Toxic
Adenoma, Nos
Leukemia, Monocytic
Cyst, Nos

Pituitary gland
Unspecified
Uterus

Multiple Organs Nos
Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_617

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Mucinous Cystadenocarcinoma
Mineralization
Nephrosis, Hydro

Liver

Inflammation, Chronic
Necrosis, Coagulative

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

Uterus

Endometrium

Hyperplasia, Cystic
Inflammation, Acute/Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_618

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos

Cast, Nos

Cyst, Nos

Mineralization

Liver

Angiectasis

Lung

Focal Cellular Change

Pituitary gland

Inflammation, Chronic

Angiectasis

Spleen

Cyst, Nos

Thyroid

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_619

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|----------------------------|
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lung | | Inflammation, Interstitial |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Spleen | | Infarct, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_620

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland
Intestine Large
Kidney

Cortex Nos

Hypertrophy, Focal
Inflammation, Suppurative
Adenomatous Polyp, Nos
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Focal Cellular Change
Hepatocellular Carcinoma

Lymph node
Pituitary gland
Thyroid
Zymbal gland

Mandibular Lymph Node

Hyperplasia, Plasma Cell
Adenoma, Nos
Hyperplasia, C Cell
Dilatation, Ducts
Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_621

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon
Colon
Cecum, Colon

Inflammation, Acute/Chronic
Inflammation, Chronic
Ulcer, Nos

Kidney

Mineralization

Lung

Leukocytosis, Nos

Lymph node

Mediastinal Lymph Node
Mediastinal Lymph Node
Mesenteric Lymph Node
Ileocolic Lymph Node

Congestion, Nos
Hyperplasia, Plasma Cell
Hyperplasia, Plasma Cell
Inflammation, Suppurative

Spleen

Myelopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_622

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon

Leiomyosarcoma

Intestine Small

Mesentery Nos

Inflammation, Acute/Chronic

Mesentery Nos

Necrosis, Fat

Kidney

Inflammation, Suppurative

Liver

Hepatitis, Toxic

Hyperplasia, Nos

Lung

Inflammation, Acute/Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Pancreatic Lymph Node

Hyperplasia, Plasma Cell

Pituitary gland

Edema, Nos

Spleen

Fibrosis

Hemosiderosis

Stomach

Submucosa

Edema, Nos

Inflammation, Acute/Chronic

Unspecified

Multiple Organs Nos

Ulcer, Acute

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_623

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|-----------------------|--------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| Thyroid | | C-Cell Adenoma |
| | | Follicular-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_624

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|------------------------|
| Intestine Large | Transverse Colon, Colon | Adenomatous Polyp, Nos |
| Kidney | | Mixed Tumor, Malignant |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Pancreas | Islets | Islet-Cell Adenoma |
| Spleen | | Fibrosis |
| | | Hemorrhage |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_625

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Hypertrophy, Focal
Cast, Nos
Inflammation, Chronic
Mineralization
Focal Cellular Change
Inflammation, Granulomatous
Fibroadenoma
Galactocele
Adenoma, Nos
C-Cell Carcinoma
Leukemia, Monocytic

Liver

Mammary gland

Pituitary gland
Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_626

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney
Liver

Ascending Colon, Colon

Pheochromocytoma
Mucinous Cystadenocarcinoma
Mineralization
Angiectasis
Hyperplasia, Nos
Metamorphosis, Fatty
Leukemia, Monocytic
Dilatation, Ducts
Hyperkeratosis

Unspecified
Zymbal gland

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_627

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver
Lung
Mammary gland
Ovary

Medulla

Metamorphosis, Fatty
Mineralization
Focal Cellular Change
Inflammation, Chronic
Fibroadenoma
Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_628

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Metamorphosis, Fatty

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Adenoma, Nos

Galactocele

Thyroid

Hyperplasia, C Cell

Tongue

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_629

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---|
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| | Ascending Colon, Colon | Mucinous Cystadenocarcinoma |
| | Colon | Parasitism |
| Kidney | | Mineralization |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lung | | Alveolar/Bronchiolar Adenoma |
| Lymph node | Ileocolic Lymph Node | Mucinous Cystadenocarcinoma, Metastatic |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_630

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|--------------|-------------------------|-----------------------------------|
| Kidney | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| Lymph node | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Cervical Lymph Node Nos | Lymphangiectasis |
| | Mandibular Lymph Node | Lymphangiectasis |
| Oral mucosa | Mouth Nos | Squamous Cell Carcinoma, Invasive |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_631

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Liver

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_632

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|---------------------|---------------------|
| Liver | | Hepatitis, Toxic |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Hyperplasia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_633

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Bone
Intestine Large
Kidney

Sternum
Ascending Colon, Colon

Hyperostosis
Signet Ring Carcinoma
Cast, Nos
Mineralization
Focal Cellular Change
Hepatitis, Toxic
Inflammation, Granulomatous
Cyst, Nos
Leukemia, Monocytic

Liver

Pituitary gland
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_634

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Mucinous Cystadenocarcinoma
Cast, Nos
Mineralization

Liver

Focal Cellular Change
Inflammation, Granulomatous

Lung

Inflammation, Chronic

Spleen

Hematopoiesis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_635

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Descending, Colon

Adenomatous Polyp, Nos
Mineralization
Focal Cellular Change
Hepatitis, Toxic
Inflammation, Chronic
Fibroadenoma
Leukemia, Monocytic
Squamous Cell Carcinoma

Lung
Mammary gland
Unspecified
Zymbal gland

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_636

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Lymph node
Spleen
Stomach
Thyroid
Uterus

Cecum, Colon

Ileocolic Lymph Node

Mucinous Cystadenocarcinoma
Mineralization
Mucinous Cystadenocarcinoma, Metastatic
Hematopoiesis
Acanthosis
Follicular-Cell Carcinoma
Endometrial Stromal Polyp
Necrosis, Fat
Steatitis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_637

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos
Mineralization

Liver
Mammary gland
Pituitary gland
Thyroid

Hepatitis, Toxic
Galactocele
Adenoma, Nos

Unspecified
Zymbal gland

Multiple Organs Nos

Hyperplasia, C Cell
Leukemia, Monocytic
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_638

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland

Heart

Intestine Large

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Thyroid

Zymbal gland

Medulla
Myocardium Nos
Transverse Colon, Colon

Mediastinal Lymph Node
Mediastinal Lymph Node

Cortical Adenoma
Hyperplasia, Focal
Fibrosis
Adenomatous Polyp, Nos
Cast, Nos
Inflammation, Chronic
Mineralization
Focal Cellular Change
Hepatocellular Carcinoma
Inflammation, Granulomatous
Neoplastic Nodule
Periarteritis
Hemorrhage
Pigmentation, Nos
Fibroadenoma
Adenoma, Nos
Follicular-Cell Carcinoma
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_639

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Lymph node
Thyroid
Unspecified
Zymbal gland

Descending, Colon
Mandibular Lymph Node
Multiple Organs Nos

Adenomatous Polyp, Nos
Mineralization
Hyperplasia, Plasma Cell
Follicular-Cell Adenoma
Leukemia, Monocytic
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_640

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Ascending Colon, Colon | Adenomatous Polyp, Nos |
| | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| | | Inflammation, Granulomatous |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_641

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|----------------|---------------------|-------------------------|
| Bone | Sternum | Fibrosis, Myelo |
| Clitoral gland | | Carcinoma, Nos |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Spleen | | Fibrosis |
| Thyroid | | Follicular-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_642

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver
Lung
Uterus

Medulla

Pheochromocytoma, Malignant
Mineralization
Focal Cellular Change
Congestion, Nos
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_643

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Transverse Colon, Colon

Adenomatous Polyp, Nos

Kidney

Mineralization

Liver

Hepatitis, Toxic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Cyst, Nos

Spleen

Infarct, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_644

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-----------------------|
| Bone | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Degeneration, Cystic |
| | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| | | Hyperplasia, Focal |
| Mammary gland | | Fibroadenoma |
| | | Hyperplasia, Nos |
| Pancreas | | Acinar-Cell Adenoma |
| Pituitary gland | | Cyst, Nos |
| Spleen | | Fibrosis |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_645

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Signet Ring Carcinoma
Mineralization
Nephrosis, Hydro

Unspecified

Multiple Organs Nos

Signet Ring Carcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_646

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Liver

Pituitary gland

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_647

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Hepatitis, Toxic
Hepatocellular Carcinoma

Lung
Thyroid

Inflammation, Acute/Chronic
Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_648

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_649

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Thyroid

Unspecified

Multiple Organs Nos

Mineralization

Hyperplasia, Focal

Neoplastic Nodule

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_650

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Thyroid

Unspecified

Mandibular Lymph Node

Mediastinal Lymph Node

Multiple Organs Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Hyperplasia, Focal

Hyperplasia, Plasma Cell

Pigmentation, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_651

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Unspecified

Cecum, Colon

Multiple Organs Nos

Mucinous Cystadenocarcinoma
Mineralization

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_652

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos
Mineralization

Liver
Lung
Mammary gland
Spleen
Thyroid
Uterus

Metamorphosis, Fatty
Inflammation, Chronic
Galactocele
Hemosiderosis
C-Cell Adenoma
Cyst, Nos

Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_653

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Medulla

Metamorphosis, Fatty

Liver

Mineralization

Lung

Focal Cellular Change

Inflammation, Acute/Chronic

Inflammation, Chronic

Mammary gland

Fibroadenoma

Ovary

Cyst, Parovarian

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Hydrometra

Vagina

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_654

TRT#: 2

DOSE: 0

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Lung

Mixed Tumor, Malignant

Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_655

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney
Liver

Mineralization
Hepatitis, Toxic
Hyperplasia, Focal
Neoplastic Nodule
Inflammation, Chronic
Hyperplasia, C Cell
Leukemia, Monocytic
Squamous Cell Carcinoma

Lung
Thyroid
Unspecified
Zymbal gland

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_656

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------|--|
| Adrenal gland | Cortex Nos | Hyperplasia, Focal Pheochromocytoma |
| Bone | Sternum | Hyperostosis |
| Intestine Large | Descending, Colon | Adenocarcinoma In Adenomatous Polyp |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Diaphragm Nos | Hernia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_657

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_658

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Intestine Small
Kidney
Liver

Colon
Duodenum

Adenomatous Polyp, Nos
Mucinous Cystadenocarcinoma
Mineralization
Hepatitis, Toxic
Neoplastic Nodule
Abscess, Nos
Leukemia, Monocytic

Oral mucosa
Unspecified

Mouth Nos
Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_659

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Hepatitis, Toxic
Hyperplasia, Nos

Lymph node
Thyroid
Unspecified

Mediastinal Lymph Node

Pigmentation, Nos
Hyperplasia, C Cell
Leukemia, Monocytic

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_660

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|-------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Necrosis, Coagulative |
| Lung | | Congestion, Nos |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Stomach | | Inflammation, Acute |
| | | Ulcer, Acute |
| Unspecified | Multiple Organs Nos | Mixed Tumor, Metastatic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_661

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon
Serosa, Colon

Mucinous Cystadenocarcinoma
Mucinous Cystadenocarcinoma, Metastatic

Kidney

Mineralization

Lung

Congestion, Nos

Lymph node

Ileocolic Lymph Node

Mucinous Cystadenocarcinoma, Metastatic

Stomach

Acanthosis

Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_662

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large

Cortex Nos
Descending, Colon
Colon

Kidney

Metamorphosis, Fatty
Adenomatous Polyp, Nos
Parasitism
Cast, Nos
Mineralization

Liver

Focal Cellular Change
Neoplastic Nodule

Lung

Lymph node

Mandibular Lymph Node
Mediastinal Lymph Node

Inflammation, Chronic
Hyperplasia, Lymphoid
Pigmentation, Nos

Mammary gland

Fibroadenoma
Galactocele

Pancreas

Islets

Islet-Cell Carcinoma

Pituitary gland

Angiectasis

Thyroid

C-Cell Carcinoma

Cystic Follicles

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_663

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-----------------------|
| Brain | | Hemorrhage |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Cyst, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_664

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|----------------------------|
| Adrenal gland | Cortex Nos | Hyperplasia, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | Alveoli | Histiocytosis |
| | | Inflammation, Interstitial |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Cyst, Nos |
| Spleen | | Fibrosis, Focal |
| Thyroid | | C-Cell Adenoma |
| | | C-Cell Carcinoma |
| Unspecified | | Fibroma |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_665

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| | Cortex Nos | Hypertrophy, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Lymphangiectasis |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Basal-Cell Tumor |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_666

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Hyperplasia, Nos

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_667

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney

Liver

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_668

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Descending, Colon

Adenomatous Polyp, Nos
Mineralization
Hepatitis, Toxic
Hyperplasia, Nos
Infarct, Nos
Squamous Cell Papilloma
Leukemia, Monocytic

Spleen
Tongue
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_669

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Intestine Large

Cortex Nos

Metamorphosis, Fatty

Kidney

Colon

Parasitism

Cast, Nos

Inflammation, Chronic

Mineralization

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Galactocele

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_670

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney
Liver

Descending, Colon

Pheochromocytoma
Adenomatous Polyp, Nos
Mineralization
Focal Cellular Change
Hepatitis, Toxic
Hyperplasia, Nos
Dilatation, Ducts
Leukemia, Monocytic

Mammary gland
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_671

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------|---------|------------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_672

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Carcinoma, Nos, Invasive |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Pigmentation, Nos |
| | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| | | Neoplastic Nodule |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Uterus | Endometrium | Hyperplasia, Cystic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_673

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon
Descending, Colon

Adenomatous Polyp, Nos
Adenomatous Polyp, Nos
Inflammation, Chronic
Mineralization

Kidney

Pigmentation, Nos
Focal Cellular Change

Liver

Lymph node

Mandibular Lymph Node
Ileocolic Lymph Node

Hyperplasia, Plasma Cell
Lymphangiectasis

Pituitary gland

Angiectasis

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_674

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|--------------------------|---|
| Adrenal gland | Cortex Nos Cortex Nos | Angiectasis Metamorphosis, Fatty Pheochromocytoma |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Hepatitis, Toxic Hepatocellular Carcinoma |
| Lung | | Inflammation, Chronic |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Stomach | Submucosa | Edema, Nos Ulcer, Acute |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_675

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|--------------|-----------------------|--------------------------|
| Kidney | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_676

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lung | | Hyperplasia, Epithelial |
| | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Hyperplasia, Nos |
| Pituitary gland | Intermedia | Adenoma, Nos |
| Thyroid | | Follicular-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_677

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Transverse Colon, Colon

Adenomatous Polyp, Nos
Cast, Nos
Inflammation, Chronic
Pigmentation, Nos
Degeneration, Cystic
Focal Cellular Change
Inflammation, Granulomatous

Liver

Mammary gland
Pituitary gland
Spleen
Stomach
Thyroid
Zymbal gland

Fibroadenoma
Adenoma, Nos
Hemosiderosis
Hyperkeratosis
C-Cell Adenoma
Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_678

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Intestine Small

Descending, Colon
Mesentery Nos
Mesentery Nos

Kidney

Adenomatous Polyp, Nos
Inflammation, Chronic
Necrosis, Fat
Cast, Nos
Mineralization

Liver

Lung

Spleen

Thyroid

Uterus

Focal Cellular Change
Inflammation, Chronic
Hemosiderosis
Hyperplasia, C Cell
Hydrometra
Hyperplasia, Cystic
Hyperkeratosis
Inflammation, Acute

Endometrium

Zymbal gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_679

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Liver
Mammary gland

Metamorphosis, Fatty
Fibroadenoma
Galactocele
Cystic Follicles
Leukemia, Monocytic

Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_680

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|---|
| Eye | Retina | Degeneration, Nos Hemorrhage Inflammation, Suppurative |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change Hepatitis, Toxic Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Lymphangiectasis |
| Mammary gland | | Fibroadenoma |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_681

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------|
| Bone | Skull | Hyperostosis |
| | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_682

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------|---------------------|---------------------|
| Liver | | Hepatitis, Toxic |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_683

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------|
| Bone | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Thyroid | | Cystic Follicles |
| | | Hyperplasia, Nos |
| Zymbal gland | | Hyperkeratosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_684

TRT#: 2

DOSE: 0

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_685

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Kidney
Liver

Mineralization
Hepatitis, Toxic
Hyperplasia, Focal
Neoplastic Nodule

Mammary gland
Unspecified

Multiple Organs Nos

Fibroadenoma
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_686

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Bone
Intestine Large
Liver

Sternum
Ascending Colon, Colon

Hyperostosis
Mucinous Cystadenocarcinoma
Hepatitis, Toxic
Neoplastic Nodule
Inflammation, Chronic
C-Cell Carcinoma
Leukemia, Monocytic
Endometrial Stromal Polyp

Lung
Thyroid
Unspecified
Uterus

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_687

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon
Descending, Colon

Adenomatous Polyp, Nos
Parasitism

Kidney

Cast, Nos
Mineralization

Liver

Pigmentation, Nos
Focal Cellular Change

Lymph node

Mediastinal Lymph Node
Mediastinal Lymph Node

Inflammation, Granulomatous
C-Cell Carcinoma, Metastatic

Thyroid

Pigmentation, Nos
C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_688

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Liver
Lymph node
Pituitary gland
Spleen
Unspecified

Cecum, Colon
Mediastinal Lymph Node
Multiple Organs Nos

Mucinous Cystadenocarcinoma
Necrosis, Coagulative
Hemorrhage
Adenoma, Nos
Hemosiderosis
Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_689

TRT#: 2
DOSE: 0

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Neoplastic Nodule |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |
| | Endometrium | Hyperplasia, Cystic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_690

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Neoplastic Nodule |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hemorrhage |
| | Renal Lymph Node | Hyperplasia, Reticulum Cell |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_691

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver
Lung
Unspecified
Zymbal gland

Descending, Colon

Multiple Organs Nos

Adenomatous Polyp, Nos
Mineralization
Inflammation, Chronic
Hyperplasia, Alveolar Epithelium
Leukemia, Monocytic
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_692

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney

Colon

Adenomatous Polyp, Nos
Cast, Nos
Inflammation, Chronic
Mineralization
Focal Cellular Change
Inflammation, Granulomatous
Inflammation, Chronic
Fibroadenoma
Adenoma, Nos

Liver

Lung
Mammary gland
Pituitary gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_693

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Cecum, Colon

Mucinous Cystadenocarcinoma
Mineralization
Inflammation, Chronic
Necrosis, Coagulative

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_694

TRT#: 2
DOSE: 0

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Clitoral gland
Intestine Large

Descending, Colon
Colon

Kidney
Liver
Lung

Carcinoma, Nos
Adenomatous Polyp, Nos
Parasitism
Mineralization
Focal Cellular Change
Inflammation, Acute/Chronic
Inflammation, Chronic
Angiectasis
C-Cell Adenoma

Pituitary gland
Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_695

TRT#: 2
DOSE: 0

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Mineralization

Liver
Thyroid
Unspecified

Multiple Organs Nos

Hepatocellular Carcinoma
Hyperplasia, C Cell
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_000

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Cortical Adenoma

Eye

Hyperplasia, Focal

Heart

Retina

Cataract

Kidney

Myocardium Nos

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Inflammation, Acute

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Carcinoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_001

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty

Cast, Nos

Mineralization

Pigmentation, Nos

Liver

Metamorphosis, Fatty

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Stomach

Acanthosis

Unspecified

Multiple Organs Nos

Inflammation, Acute/Chronic

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_002

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Lymphangiectasis |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Cyst, Nos |
| | | Hypertrophy, Focal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_003

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Kidney | | Cast, Nos |
| | | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_004

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | |
|-----------------|---------------------------|
| Liver | Focal Cellular Change |
| Lung | Inflammation, Chronic |
| Ovary | Granulosa-Cell Tumor |
| Pituitary gland | Adenoma, Nos |
| | Angiectasis |
| Thyroid | C-Cell Adenoma |
| | Follicular-Cell Carcinoma |
| Uterus | Endometrial Stromal Polyp |
| | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_005

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| | | Pigmentation, Nos |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| | Abdominal Cavity | Necrosis, Fat |
| | Abdominal Cavity | Steatitis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_006

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Clitoral gland

Kidney

Lymph node

Mammary gland

Pancreas

Pituitary gland

Spleen

Thyroid

Mandibular Lymph Node

Mediastinal Lymph Node

Islets

Carcinoma, Nos

Cast, Nos

Hyperplasia, Plasma Cell

Pigmentation, Nos

Adenocarcinoma, Nos

Galactocele

Hyperplasia, Nos

Hyperplasia, Focal

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_007

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Renal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pancreas | | Acinar-Cell Adenoma |
| | | Atrophy, Nos |
| | Islets | Islet-Cell Adenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Acute |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Carcinoma |
| Uterus | Endometrium | Hyperplasia, Nos |
| | | Inflammation, Suppurative |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_008

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Spleen

Hemosiderosis

Stomach

Acanthosis

Unspecified

Face

Inflammation, Acute/Chronic

Uterus

Squamous Cell Carcinoma

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_009

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---|---|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Brain | Ventricle | Dilatation, Nos |
| Clitoral gland | | Carcinoma, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Inflammation, Chronic Cast, Nos |
| Liver | | Inflammation, Chronic Hyperplasia, Nos Inflammation, Granulomatous Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node Mediastinal Lymph Node Mediastinal Lymph Node | Necrosis, Coagulative Hyperplasia, Plasma Cell Hyperplasia, Reticulum Cell Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Inflammation, Acute/Chronic Ulcer, Perforated |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_010

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Metamorphosis, Fatty
Necrosis, Coagulative

Lung
Lymph node

Cervical Lymph Node Nos
Mandibular Lymph Node
Mediastinal Lymph Node
Pancreatic Lymph Node

Thrombus, Fibrin
Congestion, Nos
Congestion, Nos
Congestion, Nos
Pigmentation, Nos
Fibroadenoma
Hematopoiesis
Leiomyosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_011

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_012

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Galactocele |
| Ovary | | Granulosa-Cell Tumor |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Urinary bladder | | Hyperplasia, Epithelial |
| Uterus | | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_013

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|--------------|-----------------------|--|
| Kidney | | Cast, Nos Mineralization Pigmentation, Nos |
| Liver | | Focal Cellular Change Metamorphosis, Fatty |
| Lung | | Squamous Cell Carcinoma, Metastatic |
| Lymph node | Mandibular Lymph Node | Squamous Cell Carcinoma, Metastatic |
| Spleen | | Hemosiderosis |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_014

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Pigmentation, Nos

Lung

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Inflammation, Chronic

Mammary gland

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Fibroadenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_015

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Mineralization

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Fibroadenoma

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_016

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Large
Kidney

Cortex Nos
Myocardium Nos
Colon

Metamorphosis, Fatty
Fibrosis
Parasitism
Cast, Nos
Inflammation, Chronic
Mineralization
Focal Cellular Change
Hyperplasia, Reticulum Cell
Pigmentation, Nos
Fibroadenoma
Pigmentation, Nos
Hematopoiesis

Liver
Lymph node

Mandibular Lymph Node
Mediastinal Lymph Node

Mammary gland
Pituitary gland
Spleen

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_017

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | | Pheochromocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Fibrosis |
| | | Hemosiderosis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_018

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Inflammation, Granulomatous

Lymph node

Mandibular Lymph Node

Hyperplasia, Reticulum Cell

Mandibular Lymph Node

Pigmentation, Nos

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_019

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic

Kidney

Mineralization

Liver

Focal Cellular Change

Lymph node

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Spleen

Hemosiderosis

Uterus

Hydrometra

PRIMARY CAUSE OF DEATH

-

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_020

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---|--|
| Kidney | | Cast, Nos Mineralization |
| Liver | | Pigmentation, Nos Focal Cellular Change Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node Mesenteric Lymph Node Pancreatic Lymph Node | Metamorphosis, Fatty Hyperplasia, Plasma Cell Pigmentation, Nos Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | Submucosa | Edema, Nos Inflammation, Acute |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_021

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Mammary gland

Fibroadenoma

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Myelomonocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_022

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|--------------------------------------|
| Adrenal gland | | Pheochromocytoma |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | | Hemorrhage |
| | | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Lymphoma, Histiocytic-Malignant Type |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Necrosis, Focal |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_023

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney

Colon

Cortical Carcinoma
Parasitism
Cast, Nos
Inflammation, Chronic
Mineralization

Lymph node
Mammary gland

Mandibular Lymph Node

Pigmentation, Nos
Hyperplasia, Plasma Cell
Fibroadenoma
Galactocele

Spleen
Thyroid
Unspecified

Multiple Organs Nos

Hemosiderosis
C-Cell Carcinoma
Cortical Carcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_024

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hyperplasia, Nos |
| | Hepatic Sinusoid | Leukocytosis, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Lymphoma, Histiocytic-Malignant Type |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Cyst, Nos |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Stomach | Submucosa | Edema, Nos |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Chronic |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Foot Nos | Fibroma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_025

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Pigmentation, Nos

Lymph node

Hepatocellular Carcinoma

Mammary gland

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Fibroadenoma

Parathyroid gland

Galactocele

Pituitary gland

Hyperplasia, Nos

Spleen

Adenoma, Nos

Thyroid

Hemosiderosis

Cystic Follicles

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_026

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Cortex Nos
Myocardium Nos

Metamorphosis, Fatty
Fibrosis
Cast, Nos
Mineralization
Pigmentation, Nos
Inflammation, Interstitial
Hyperplasia, Plasma Cell
Inflammation, Suppurative
Pigmentation, Nos
Squamous Cell Carcinoma
Angiectasis
Hemosiderosis
C-Cell Adenoma

Lung
Lymph node

Mandibular Lymph Node
Mandibular Lymph Node
Mediastinal Lymph Node

Oral mucosa
Pituitary gland
Spleen
Thyroid

Mouth Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_027

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Lymph node

Mesenteric Lymph Node

Focal Cellular Change

Mammary gland

Necrosis, Coagulative

Thyroid

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Galactocele

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_028

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Skull | Hyperostosis |
| | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Skin | | Keratoacanthoma |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Abdominal Cavity | Steatitis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_029

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Mesenteric Lymph Node

Unspecified

Multiple Organs Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Pigmentation, Nos

Adenoma, Nos

Fibroadenoma

Galactocele

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_030

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Fibrosis

Kidney

Mineralization

Ovary

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Cyst, Parovarian

Uterus

Leukemia, Monocytic

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_031

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Liver | | Cyst, Nos |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_032

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Lymph node

Mediastinal Lymph Node

Hepatitis, Toxic

Mammary gland

Neoplastic Nodule

Thyroid

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Fibroadenoma

Galactocele

Cystic Follicles

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_033

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Bone | Sternum | Fibrosis, Myelo |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Ovary | | Cyst, Nos |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Cyst, Nos C-Cell Adenoma C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_034

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------|
| Liver | | Focal Cellular Change |
| Lymph node | Pancreatic Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_035

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Fibrosis

Kidney

Mineralization

Pigmentation, Nos

Liver

Hepatitis, Toxic

Ovary

Cyst, Parovarian

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_036

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | | Congestion, Nos |
| | Cortex Nos | Degeneration, Cystic |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Angiectasis |
| | | Hyperplasia, Focal |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_037

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Carcinoma, Nos, Invasive |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lung | | Alveolar/Bronchiolar Adenoma |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Acinar-Cell Adenoma |
| | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | Submucosa | Edema, Nos |
| | | Ulcer, Acute |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | | Fibrosarcoma |
| | Multiple Organs Nos | Pigmentation, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_038

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lung

Lymph node

Mammary gland

Spleen

Thyroid

Cortex Nos

Mediastinal Lymph Node

Mesenteric Lymph Node

Pancreatic Lymph Node

Mediastinal Lymph Node

Pancreatic Lymph Node

Angiectasis

Metamorphosis, Fatty

Mineralization

Pigmentation, Nos

Angiectasis

C-Cell Carcinoma, Metastatic

Hemorrhage

Hyperplasia, Reticulum Cell

Hyperplasia, Reticulum Cell

Pigmentation, Nos

Pigmentation, Nos

Fibroadenoma

Hemosiderosis

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_039

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|----------------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hyperplasia, Nos |
| Lung | | Hyperplasia, Alveolar Epithelium |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| Thyroid | | Follicular-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_040

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Lymph node

Mammary gland

Ovary

Unspecified

Mesenteric Lymph Node

Multiple Organs Nos

Cortical Carcinoma

Cast, Nos

Mineralization

Pigmentation, Nos

Galactocele

Cyst, Nos

Cortical Carcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_041

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Medulla

Hyperplasia, Focal
Cast, Nos

Lymph node
Mammary gland

Mediastinal Lymph Node

Inflammation, Chronic
Pigmentation, Nos

Pituitary gland
Spleen

Fibroadenoma
Galactocele

Unspecified

Back

Adenoma, Nos
Hemosiderosis

Uterus

Multiple Organs Nos

Fibroma
Leukemia, Monocytic
Pyometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_042

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Inflammation, Granulomatous
Metamorphosis, Fatty

Mammary gland

Galactocele

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

C-Cell Carcinoma

Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_043

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------|-------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Intestine Small | Ileum | Inflammation, Acute |
| | Ileum | Ulcer, Acute |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Necrosis, Nos |
| | | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Oral mucosa | Palate | Squamous Cell Papilloma |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Angiectasis |
| | | Pigmentation, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_044

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hematopoiesis |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Pancreatic Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Thyroid | | Cystic Follicles |
| Unspecified | Multiple Organs Nos | Hyperplasia, Plasma Cell |
| | Multiple Organs Nos | Inflammation, Suppurative |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_045

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mammary gland

Mineralization

Pituitary gland

Fibroadenoma

Spleen

Adenoma, Nos

Thyroid

Hemosiderosis

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_046

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Bone | Sternum | Fibrosis, Myelo |
| | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Fibrosis |
| | | Hemosiderosis |
| | Capsule | Inflammation, Chronic |
| Thyroid | | C-Cell Adenoma |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_047

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Pituitary gland

Skin

Stomach

Pheochromocytoma

Cast, Nos

Hepatitis, Toxic

Adenoma, Nos

Basal-Cell Carcinoma

Acanthosis

Inflammation, Acute/Chronic

Ulcer, Perforated

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_048

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Brain
Kidney

Cortex Nos

Metamorphosis, Fatty
Carcinoma, Nos, Invasive
Cast, Nos
Mineralization

Liver

Periportal

Fibrosis
Inflammation, Granulomatous

Lymph node
Pituitary gland

Mediastinal Lymph Node

Pigmentation, Nos
Carcinoma, Nos

Spleen
Thyroid

Hemosiderosis
Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_049

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|----------------|---------------------------|
| Adrenal gland | | Pheochromocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Ovary | | Cyst, Nos |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_050

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Cortex Nos | Hyperplasia, Focal |
| Bone | Sternum | Fibrosis, Myelo |
| | Sternum | Hyperostosis |
| Ear | | Cyst, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Small | Peyers Patch | Hyperplasia, Lymphoid |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Pigmentation, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_051

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lymph node

Mandibular Lymph Node

Hepatitis, Toxic

Mammary gland

Hyperplasia, Plasma Cell

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_052

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Angiectasis
Cast, Nos
Inflammation, Chronic
Mineralization
Thrombus, Fibrin

Liver

Metamorphosis, Fatty
Hyperplasia, Plasma Cell
Pigmentation, Nos

Lymph node

Mandibular Lymph Node

Mammary gland

Pancreatic Lymph Node

Adenoma, Nos
Fibroadenoma

Pituitary gland

Angiectasis
Hyperplasia, Focal
Squamous Cell Papilloma
Hematopoiesis

Skin

Spleen

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_053

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Clitoral gland | | Carcinoma, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Leukocytosis, Nos |
| Lung | | Inflammation, Chronic |
| Lymph node | Celiac Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Ovary | | Granulosa-Cell Tumor |
| Pituitary gland | | Adenoma, Nos |
| Skin | Vulva Nos | Fibrosarcoma, Invasive |
| Spleen | | Hematopoiesis |
| Stomach | | Carcinoid Tumor, Nos |
| Thyroid | | Cystic Follicles |
| | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Vagina | | Fibrosarcoma |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_054

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Kidney

Cortex Nos

Metamorphosis, Fatty

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Adenoma, Nos

Galactocele

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_055

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Head | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_056

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Atrophy, Nos

Bone

Cortical Carcinoma

Heart

Sternum

Hyperostosis

Kidney

Myocardium Nos

Fibrosis

Cast, Nos

Liver

Inflammation, Chronic

Lymph node

Mediastinal Lymph Node

Cortical Carcinoma, Metastatic

Hemorrhage

Mediastinal Lymph Node

Pigmentation, Nos

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Hyperplasia, Nos

Pituitary gland

Angiectasis

Spleen

Hemosiderosis

Thyroid

C-Cell Carcinoma

Cystic Follicles

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_057

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Mammary gland | | Fibroadenoma |
| Pancreas | | Acinar-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_059

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Mammary gland
Spleen
Thyroid

Mineralization
Fibroadenoma
Hemosiderosis
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_060

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland

Cortex Nos

Degeneration, Cystic
Dilatation, Ducts
Hyperplasia, Epithelial

Eye

Retina

Cataract
Degeneration, Nos
Inflammation, Chronic

Kidney

Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Lymph node

Mammary gland

Mediastinal Lymph Node

Focal Cellular Change
Pigmentation, Nos
Adenoma, Nos
Fibroadenoma
Galactocele

Parathyroid gland

Pituitary gland

Spleen

Thyroid

Adenoma, Nos
Adenoma, Nos
Hemosiderosis
C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_061

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|--------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Mammary gland | | Carcinoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_062

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|----------------|-----------------------------|
| Adrenal gland | | Pheochromocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_063

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Maxilla | Squamous Cell Carcinoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| | | Pigmentation, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Fibroadenoma |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_064

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Hepatitis, Toxic
Metamorphosis, Fatty
Neoplastic Nodule
Islet-Cell Carcinoma
Leukemia, Monocytic

Pancreas
Unspecified

Islets
Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_065

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Metamorphosis, Fatty |
| | | Necrosis, Coagulative |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Stomach | Submucosa | Edema, Nos |
| | | Inflammation, Acute/Chronic |
| Thyroid | | Ulcer, Chronic |
| | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_066

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------------|
| Clitoral gland | | Abscess, Nos |
| | | Carcinoma, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Pigmentation, Nos |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Pancreas | | Acinar-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Squamous Cell Papilloma |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_067

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Skin | Tail | Squamous Cell Papilloma |
| Spleen | | Hemosiderosis |
| Stomach | Submucosa | Edema, Interstitial |
| | | Inflammation, Acute |
| | | Ulcer, Acute |
| Thyroid | | Follicular-Cell Carcinoma |
| Unspecified | Perineum Nos | Fibrosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_068

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Lung

Lymph node

Mammary gland

Pituitary gland

Retina

Axillary Lymph Node

Mandibular Lymph Node

Mesenteric Lymph Node

Pheochromocytoma

Cataract

Degeneration, Nos

Adenocarcinoma, Nos, Metastatic

Cast, Nos

Inflammation, Chronic

Mineralization

Adenocarcinoma, Nos, Metastatic

Adenocarcinoma, Nos, Metastatic

Hyperplasia, Plasma Cell

Pigmentation, Nos

Adenocarcinoma, Nos

Galactocele

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_069

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Adenoma, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Infarct, Acute |
| Thyroid | | Follicular-Cell Carcinoma |
| | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| | Back | Lipoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_070

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Bile Duct

Inflammation, Chronic

Lung

Hyperplasia, Nos

Lymph node

Mediastinal Lymph Node

C-Cell Carcinoma, Metastatic

Pancreas

Mandibular Lymph Node

C-Cell Carcinoma, Metastatic

Pituitary gland

Islets

Hyperplasia, Plasma Cell

Spleen

Islet-Cell Carcinoma

Thyroid

Adenoma, Nos

Hemosiderosis

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_071

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_072

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|---------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_073

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|-------------------------|----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Parathyroid gland | | C-Cell Carcinoma, Invasive |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_074

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Eye | Retina | Cataract |
| Heart | Myocardium Nos | Degeneration, Nos |
| Kidney | | Fibrosis Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Inflammation, Granulomatous |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Cyst, Nos Hypertrophy, Focal |
| Spleen | | Hemosiderosis |
| Thyroid | | Cystic Follicles |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_075

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Inflammation, Chronic

Hepatitis, Toxic

Lymph node

Mesenteric Lymph Node

Metamorphosis, Fatty

Mammary gland

Pigmentation, Nos

Pituitary gland

Galactocele

Stomach

Adenoma, Nos

Unspecified

Multiple Organs Nos

Acanthosis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_076

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Necrosis, Nos

Clitoral gland

Carcinoma, Nos

Kidney

Mineralization

Liver

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Fibroadenoma

Pituitary gland

Galactocele

Stomach

Submucosa

Angiectasis

Edema, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_077

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Inflammation, Chronic |
| Lymph node | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| | Pancreatic Lymph Node | Hyperplasia, Reticulum Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Chest | Fibroma |
| Uterus | | Thrombus, Fibrin |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_078

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Adrenal gland | Cortex Nos | Degeneration, Cystic |
| Clitoral gland | | Carcinoma, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Lung | | Inflammation, Chronic |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_079

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Metamorphosis, Fatty

Mammary gland

Carcinoma, Nos

Cyst, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

Uterus

Cervix Uteri

Fibroma

Endometrium

Hyperplasia, Cystic

Cervix Uteri

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_080

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Clitoral gland | | Carcinoma, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | Bile Duct | Hyperplasia, Nos |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Pigmentation, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute |
| | | Ulcer, Acute |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_081

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver
Lymph node

Bile Duct
Mandibular Lymph Node
Mediastinal Lymph Node

Hyperplasia, Nos
Hyperplasia, Plasma Cell
Pigmentation, Nos

Mammary gland
Pituitary gland

Fibroadenoma
Angiectasis

Thyroid
Unspecified
Uterus

Multiple Organs Nos

Pigmentation, Nos
Follicular-Cell Adenoma
Leukemia, Monocytic
Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_082

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Mammary gland

Unspecified

Multiple Organs Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Inflammation, Chronic

Galactocele

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_083

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Lung

Pigmentation, Nos

Lymph node

Inflammation, Chronic

Mammary gland

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Pituitary gland

Galactocele

Spleen

Adenoma, Nos

Thyroid

Hemosiderosis

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_084

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lymph node

Mediastinal Lymph Node

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Pigmentation, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_085

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Bone

Sternum

Hyperostosis

Kidney

Mineralization

Pigmentation, Nos

Lung

Congestion, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_086

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Intestine Large | Colon | Parasitism |
| Kidney | | Cast, Nos Mineralization |
| Liver | | Pigmentation, Nos Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Pigmentation, Nos |
| Mammary gland | Mediastinal Lymph Node | Hyperplasia, Plasma Cell Pigmentation, Nos |
| Pituitary gland | | Fibroadenoma |
| Spleen | | Galactocele |
| Thyroid | | Hyperplasia, Focal |
| Unspecified | Multiple Organs Nos | Hemosiderosis |
| Uterus | Endometrium | Hyperplasia, C Cell Inflammation, Chronic Hyperplasia, Cystic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_087

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Unspecified | Diaphragm Nos | Hernia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_088

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|---|---|
| Adrenal gland | Cortex Nos Cortex Nos Cortex Nos | Degeneration, Cystic Hyperplasia, Focal Metamorphosis, Fatty |
| Eye | Retina | Cataract |
| Heart | Myocardium Nos | Degeneration, Nos |
| Kidney | | Fibrosis Cast, Nos Inflammation, Chronic Mineralization Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node Cervical Lymph Node Nos Mediastinal Lymph Node | Hemorrhage Pigmentation, Nos Pigmentation, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_089

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_090

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---|
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Focal Cellular Change Hematopoiesis Pigmentation, Nos |
| Lung | | Inflammation, Interstitial |
| Lymph node | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| | Pancreatic Lymph Node | Hyperplasia, Reticulum Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Hyperplasia, Lymphoid |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_091

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Pigmentation, Nos |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_092

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | | Carcinoma, Nos, Invasive |
| Clitoral gland | | Carcinoma, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_093

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Necrosis, Coagulative

Hyperplasia, Plasma Cell

Lymph node

Mandibular Lymph Node

Pituitary gland

Angiectasis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_094

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------------|
| Adrenal gland | Cortex Nos | Necrosis, Nos |
| Clitoral gland | | Abscess, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Salivary gland | | Inflammation, Suppurative |
| Spleen | | Hematopoiesis |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_095

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Lymph node

Spleen

Uterus

Bronchus

Mediastinal Lymph Node

Mediastinal Lymph Node

Cervix Uteri

Mineralization

Metamorphosis, Fatty

Edema, Nos

Congestion, Nos

Pigmentation, Nos

Hematopoiesis

Pigmentation, Nos

Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_096

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Infarct, Nos

Liver

Mineralization

Spleen

Metamorphosis, Fatty

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_097

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Celiac Lymph Node | Fibrosis |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Celiac Lymph Node | Lymphangiectasis |
| | Celiac Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pancreas | Islets | Islet-Cell Adenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| Thyroid | | Inflammation, Chronic Focal |
| Urinary bladder | | Hyperplasia, Epithelial |
| | | Inflammation, Granulomatous |
| Uterus | Cervix Uteri | Cyst, Nos |
| | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_098

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Mammary gland

Ovary

Pancreas

Pituitary gland

Retina

Myocardium Nos

Islets

Cortical Adenoma

Cataract

Degeneration, Nos

Inflammation, Chronic

Cast, Nos

Mineralization

Pigmentation, Nos

Focal Cellular Change

Fibroadenoma

Mineralization

Islet-Cell Adenoma

Angiectasis

Pigmentation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_099

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|---------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_100

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Focal Cellular Change

Mammary gland

Fibroadenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_101

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Cortex Nos
Myocardium Nos

Hypertrophy, Focal
Fibrosis
Mineralization
Pigmentation, Nos
Necrosis, Coagulative
Cystic Follicles
Leukemia, Monocytic
Hyperplasia, Epithelial
Inflammation, Granulomatous

Liver
Thyroid
Unspecified
Urinary bladder

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:14

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_102

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Spinal cord

Spleen

Thyroid

Mineralization

Oligodendroglioma

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:14
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_103

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|-------------------------------------|---|
| Adrenal gland | Cortex Nos Cortex Nos Medulla | Hypertrophy, Focal Metamorphosis, Fatty Pheochromocytoma |
| Eye | Retina | Cataract Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Cyst, Nos Inflammation, Chronic Mineralization |
| Liver | Bile Duct | Focal Cellular Change Hyperplasia, Nos Inflammation, Granulomatous Pigmentation, Nos Hyperplasia, Alveolar Epithelium |
| Lung | | Galactocele |
| Mammary gland | | Atrophy, Nos |
| Pancreas | | Hemosiderosis |
| Spleen | | Adenomatous Polyp, Nos |
| Stomach | | Inflammation, Chronic Focal |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Abdominal Cavity | Steatitis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_104

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lymph node

Mediastinal Lymph Node

Hepatitis, Toxic

Mammary gland

Metamorphosis, Fatty

Thyroid

Hemorrhage

Unspecified

Multiple Organs Nos

Galactocele

C-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_105

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Cortex Nos
Myocardium Nos

Metamorphosis, Fatty
Fibrosis
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Bile Duct

Hyperplasia, Nos
Metamorphosis, Fatty
Hyperplasia, Plasma Cell
Fibroadenoma
Galactocele

Lymph node
Mammary gland

Mandibular Lymph Node

Inflammation, Suppurative
Adenoma, Nos
Hemosiderosis
Follicular-Cell Carcinoma

Oral mucosa
Pituitary gland
Spleen
Thyroid

Oral Cavity

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_106

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|--------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pancreas | | Atrophy, Nos |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_107

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Retina

Harderian gland

Heart

Kidney

Hardarian Gland

Myocardium Nos

Liver

Parathyroid gland

Pituitary gland

Thyroid

Unspecified

Multiple Organs Nos

Congestion, Nos

Cataract

Degeneration, Nos

Fibroma

Atrophy, Nos

Fibrosis

Cast, Nos

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Thrombus, Organized

Hyperplasia, Nos

Angiectasis

C-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_108

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | | Cortical Adenoma |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Pigmentation, Nos |
| Liver | | Inflammation, Suppurative |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Carcinoma, Nos |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute/Chronic |
| | | Ulcer, Chronic |
| Thyroid | | C-Cell Adenoma |
| | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_109

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Necrosis, Coagulative |
| | | Pigmentation, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| | Mandibular Lymph Node | Squamous Cell Carcinoma, Metastatic |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Salivary gland | | Inflammation, Chronic |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_110

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Adenoma, Nos |
| Salivary gland | | Adenocarcinoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_111

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Liver

Lymph node

Ovary
Stomach

Unspecified

Mediastinal Lymph Node
Mesenteric Lymph Node

Submucosa

Multiple Organs Nos

Cortical Carcinoma
Cast, Nos
Inflammation, Chronic
Mineralization
Hepatitis, Toxic
Metamorphosis, Fatty
Pigmentation, Nos
Pigmentation, Nos
Cyst, Parovarian
Acanthosis
Edema, Nos
Inflammation, Suppurative
Ulcer, Acute
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_112

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Mineralization

Liver
Lung
Spleen
Stomach

Metamorphosis, Fatty
Congestion, Nos
Hemosiderosis
Inflammation, Acute/Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_113

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Brain

Ventricle

Dilatation, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Metamorphosis, Fatty

Mammary gland

Galactocele

Ovary

Cyst, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Stomach

Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_114

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Fibrosis |
| | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_115

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Liver
Lung

Lymph node
Pituitary gland

Thyroid

Uterus

Mediastinal Lymph Node

Cervix Uteri

Angiectasis
Mineralization
Pigmentation, Nos
Focal Cellular Change
Inflammation, Chronic
Pigmentation, Nos
Hyperplasia, Focal
Hyperplasia, C Cell
Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_116

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lung | Alveoli | Histiocytosis |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Carcinoid Tumor, Nos |
| Thyroid | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_117

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | | Cortical Adenoma |
| Bone | Skull | Hyperostosis |
| | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Pigmentation, Nos |
| Lung | Alveoli | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Histiocytosis |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Pigmentation, Nos |
| Pancreas | Islets | Fibroadenoma |
| Pituitary gland | | Islet-Cell Adenoma |
| Thyroid | | Angiectasis |
| Uterus | | Hyperplasia, C Cell |
| | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_118

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Hepatitis, Toxic |
| | Bile Duct | Hyperplasia, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pancreas | Islets | Islet-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_119

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|----------------------------|
| Adrenal gland | Medulla | Pheochromocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Submucosa, Colon | Fibrosis, Focal |
| | Cecum, Colon | Parasitism |
| Kidney | | Cast, Nos |
| | | Pigmentation, Nos |
| Liver | | Hepatitis, Toxic |
| | | Necrosis, Coagulative |
| Lymph node | Ileocolic Lymph Node | Inflammation, Suppurative |
| | Mesenteric Lymph Node | Inflammation, Suppurative |
| | Ileocolic Lymph Node | Lymphangiectasis |
| Mammary gland | | Galactocele |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Thorax | Fibroma |
| | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Uterus | | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_120

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Hyperplasia, Focal |
| Spleen | | Hemosiderosis |
| Stomach | Submucosa | Acanthosis |
| | | Edema, Nos |
| | | Inflammation, Acute/Chronic |
| Thyroid | | Follicular-Cell Adenoma |
| Uterus | | Leiomyoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_121

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Spleen

Stomach

Mineralization

Hemosiderosis

Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_122

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Galactocele

Ovary

Cyst, Parovarian

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_123

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Brain

Carcinoma, Nos, Invasive

Clitoral gland

Carcinoma, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Carcinoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_124

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Brain | Meninges | Inflammation, Acute/Chronic |
| Kidney | | Mineralization |
| Liver | | Inflammation, Acute/Chronic |
| | | Necrosis, Coagulative |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Inflammation, Acute/Chronic |
| Spleen | | Hematopoiesis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_125

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Serosa, Colon | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | Hepatic Sinusoid | Leukocytosis, Nos |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Ileocolic Lymph Node | Lymphangiectasis |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | Cervix Uteri | Hyperplasia, Stromal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_126

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lung

Inflammation, Interstitial

Mammary gland

Fibroadenoma

Pancreas

Acinar-Cell Adenoma

Thyroid

C-Cell Adenoma

Uterus

Endometrium

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_127

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | |
|-----------------|-----------------------|
| Brain | Astrocytoma |
| Kidney | Mineralization |
| | Pigmentation, Nos |
| Lung | Inflammation, Chronic |
| Pituitary gland | Cyst, Nos |
| Spleen | Hemosiderosis |
| Thyroid | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_128

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Kidney

Metamorphosis, Fatty

Liver

Mineralization

Lymph node

Focal Cellular Change

Mandibular Lymph Node

Lymphangiectasis

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_129

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---|---|
| Adrenal gland | Cortex Nos Medulla | Angiectasis Hyperplasia, Focal |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization Pigmentation, Nos |
| Liver | Periportal | Fibrosis |
| Lymph node | Mediastinal Lymph Node Mandibular Lymph Node | Pigmentation, Nos Squamous Cell Carcinoma, Metastatic |
| Mammary gland | | Adenoma, Nos Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Adenoma Hyperplasia, C Cell |
| Unspecified | Diaphragm Nos | Hernia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_130

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|-----------------------|--|
| Bone | Sternum | Hyperostosis |
| Kidney | | Mineralization |
| Lung | | Alveolar/Bronchiolar Carcinoma |
| Lymph node | Pancreatic Lymph Node | Hyperplasia, Reticulum Cell |
| Unspecified | Multiple Organs Nos | Alveolar/Bronchiolar Carcinoma, Metastatic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_131

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization
Pigmentation, Nos

Liver
Mammary gland

Metamorphosis, Fatty
Fibroadenoma
Galactocele

Pancreas
Pituitary gland
Spleen
Stomach

Atrophy, Nos
Adenoma, Nos
Hemosiderosis
Ulcer, Acute

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_132

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------|---|
| Bone | Sternum | Hyperostosis |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Focal Cellular Change Inflammation, Granulomatous Pigmentation, Nos |
| Mammary gland | | Fibroadenoma Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma Follicular-Cell Carcinoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_133

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Ovary

Unspecified

Multiple Organs Nos

Papillary Adenocarcinoma

Papillary Adenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_134

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Cyst, Nos |
| | Endometrium | Hyperplasia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_135

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Unspecified

Uterus

Multiple Organs Nos

Mineralization

Leukemia, Monocytic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_136

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------|-------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Adenoma |
| Unspecified | Mediastinum Nos | Inflammation, Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_137

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Brain

Hemorrhage

Clitoral gland

Carcinoma, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Pancreas

Atrophy, Nos

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_138

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Pigmentation, Nos

Liver

Inflammation, Granulomatous

Lung

Hyperplasia, Alveolar Epithelium

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mandibular Lymph Node

Pigmentation, Nos

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_139

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | | Angiectasis |
| | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Clitoral gland | | Dilatation, Ducts |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Groin | Fibroma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_140

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland
Kidney

Pheochromocytoma

Liver
Lymph node

Carcinoma, Nos

Mineralization

Pigmentation, Nos

Necrosis, Coagulative

Mediastinal Lymph Node

Pigmentation, Nos

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Spleen

Hematopoiesis

Thyroid

Hyperplasia, C Cell

Unspecified

Leg

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_141

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Brain | | Carcinoma, Nos, Invasive |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Pigmentation, Nos |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_142

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Mammary gland

Focal Cellular Change

Pituitary gland

Inflammation, Granulomatous

Spleen

Fibroadenoma

Uterus

Galactocele

Angiectasis

Hemosiderosis

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_143

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Brain

Carcinoma, Nos, Invasive

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Mammary gland

Adenoma, Nos

Galactocele

Pituitary gland

Carcinoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_144

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Mineralization
Pigmentation, Nos

Liver

Angiectasis
Metamorphosis, Fatty

Mammary gland

Fibroadenoma
Galactocele

Pituitary gland

Angiectasis

Stomach

Ulcer, Acute

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_145

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Thyroid

Retina

Myocardium Nos

Mandibular Lymph Node

Pheochromocytoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Angiectasis

Hyperplasia, Plasma Cell

Fibroadenoma

Hypertrophy, Focal

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_146

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Cortical Carcinoma

Eye

Hyperplasia, Nos

Kidney

Retina

Cataract

Degeneration, Nos

Cast, Nos

Mineralization

Pigmentation, Nos

Liver

Bile Duct

Hyperplasia, Nos

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Mandibular Lymph Node

Pigmentation, Nos

Fibroadenoma

Pituitary gland

Galactocele

Spleen

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_147

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Inflammation, Chronic

Mammary gland

Hepatitis, Toxic

Stomach

Metamorphosis, Fatty

Galactocele

Inflammation, Suppurative

Unspecified

Multiple Organs Nos

Ulcer, Acute

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_148

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Chronic |
| Uterus | Cervix Uteri | Hyperplasia, Stromal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_149

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|----------------|---------------------|-------------------------|
| Bone | Sternum | Hyperostosis |
| Clitoral gland | | Squamous Cell Carcinoma |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_150

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Mesenteric Lymph Node

Pigmentation, Nos

Pancreatic Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Spleen

Galactocele

Stomach

Hemosiderosis

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_151

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_152

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Spleen

Thyroid

Carcinoma, Nos

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_153

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Inflammation, Suppurative |
| | | Ulcer, Acute |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_154

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Brain
Heart
Intestine Large
Kidney

Cortex Nos

Myocardium Nos
Cecum, Colon

Metamorphosis, Fatty
Astrocytoma
Fibrosis
Ulcer, Acute
Cast, Nos
Inflammation, Chronic
Mineralization
Pigmentation, Nos
Metamorphosis, Fatty
Galactocele
Hemosiderosis
Acanthosis
Hyperkeratosis
Inflammation, Acute/Chronic
Ulcer, Acute
Cystic Follicles
Hyperplasia, C Cell
Cyst, Nos

Liver
Mammary gland
Spleen
Stomach

Thyroid

Uterus

Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_155

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Groin | Fibroma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_156

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Lymph node

Mandibular Lymph Node

Mineralization

Pituitary gland

Hyperplasia, Plasma Cell

Spleen

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_157

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--|
| Adrenal gland | | Cortical Adenoma Degeneration, Cystic |
| Bone | Skull Sternum | Hyperostosis Hyperostosis |
| Eye | | Cataract |
| Kidney | Retina | Degeneration, Nos Cast, Nos Inflammation, Chronic Mineralization Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma Galactocele |
| Pituitary gland | | Angiectasis Hypertrophy, Focal |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_158

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| | | Inflammation, Suppurative |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Axillary Lymph Node | Hyperplasia, Plasma Cell |
| | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Head | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_159

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Eye

Heart

Kidney

Liver

Spleen

Retina

Myocardium Nos

Cortical Adenoma

Astrocytoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Mineralization

Inflammation, Granulomatous

Metamorphosis, Fatty

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_160

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| | | Necrosis, Coagulative |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Spleen | | Hemosiderosis |
| Uterus | Cervix Uteri | Hyperplasia, Stromal |
| Vagina | | Endometrial Stromal Sarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_161

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Liver

Mineralization

Lymph node

Focal Cellular Change

Unspecified

Pancreatic Lymph Node

Pigmentation, Nos

Uterus

Multiple Organs Nos

Leukemia, Monocytic

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_162

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Hepatitis, Toxic

Bile Duct

Hyperplasia, Nos

Pituitary gland

Hyperplasia, Focal

Unspecified

Multiple Organs Nos

Pigmentation, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_163

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Kidney

Liver

Mammary gland

Oral mucosa

Spleen

Thymus

Thyroid

Mouth Nos

Cortical Adenoma

Inflammation, Suppurative

Squamous Cell Carcinoma

Cast, Nos

Inflammation, Chronic

Mineralization

Metamorphosis, Fatty

Galactocele

Abscess, Nos

Hemosiderosis

Cyst, Nos

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_164

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Pigmentation, Nos |
| Pituitary gland | | Galactocele |
| Thyroid | | Angiectasis |
| Unspecified | Multiple Organs Nos | C-Cell Carcinoma |
| Uterus | | Leukemia, Monocytic |
| | Endometrium | Endometrial Stromal Polyp |
| | | Hyperplasia, Cystic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_165

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Inflammation, Chronic
Mineralization

Liver
Lung
Lymph node

Mesenteric Lymph Node
Mediastinal Lymph Node

Focal Cellular Change
Inflammation, Chronic
Lymphangiectasis
Pigmentation, Nos

Pituitary gland
Spleen
Uterus

Cervix Uteri
Broad Ligament

Angiectasis
Hemosiderosis
Endometrial Stromal Sarcoma
Leiomyoma
Endometrial Stromal Sarcoma

Vagina

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_166

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Cortex Nos
Myocardium Nos

Metamorphosis, Fatty
Fibrosis
Cast, Nos
Inflammation, Chronic

Mammary gland
Pituitary gland
Preputial gland
Stomach

Submucosa

Fibroadenoma
Adenoma, Nos
Dilatation, Ducts
Edema, Nos
Inflammation, Acute
Ulcer, Acute
Hyperplasia, C Cell
Leukemia, Myelomonocytic

Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_167

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Angiectasis

Kidney

Thrombus, Organized

Lymph node

Mandibular Lymph Node

Mineralization

Pituitary gland

Pigmentation, Nos

Skin

Nose

Hyperplasia, Plasma Cell

Adenoma, Nos

Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_168

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Clitoral gland | | Carcinoma, Nos |
| Eye | Retina | Cataract Degeneration, Nos Inflammation, Chronic |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Inflammation, Chronic Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Inflammation, Chronic |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_169

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Inflammation, Chronic

Focal Cellular Change

Lymph node

Bile Duct

Hyperplasia, Nos

Mammary gland

Mandibular Lymph Node

Hyperplasia, Lymphoid

Skin

Mesenteric Lymph Node

Hyperplasia, Plasma Cell

Spleen

Galactocele

Urinary bladder

Squamous Cell Carcinoma

Hemosiderosis

Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_170

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|-------------------------|------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Heart | Myocardium Nos | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | C-Cell Carcinoma, Metastatic |
| Lymph node | Cervical Lymph Node Nos | C-Cell Carcinoma, Metastatic |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_171

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_172

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal
Pheochromocytoma

Heart

Myocardium Nos

Fibrosis

Intestine Large

Descending, Colon

Leiomyoma

Kidney

Mineralization

Pigmentation, Nos

Liver

Hepatitis, Toxic

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Thyroid

Cystic Follicles

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_173

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Periportal

Mineralization

Fibrosis

Hepatitis, Toxic

Mammary gland

Bile Duct

Hyperplasia, Nos

Fibroadenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Abdominal Cavity

Steatitis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_174

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Inflammation, Acute/Chronic

Kidney

Mineralization

Liver

Hepatitis, Toxic

Lymph node

Mandibular Lymph Node

Lymphangiectasis

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Angiectasis

Thyroid

Hyperplasia, Focal

Unspecified

Multiple Organs Nos

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_175

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart
Intestine Large
Kidney

Myocardium Nos
Colon

Fibrosis
Parasitism
Cast, Nos
Mineralization
Galactocele
Adenoma, Nos
Hemosiderosis

Mammary gland
Pituitary gland
Spleen

PRIMARY CAUSE OF DEATH

-

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_176

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|-----------------------------|
| Bone | Sternum | Hyperostosis |
| Brain | | Astrocytoma |
| Kidney | | Cast, Nos |
| | | Cyst, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | Submucosa | Edema, Nos |
| | | Inflammation, Suppurative |
| Thyroid | | Ulcer, Nos |
| | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_177

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Mineralization
Pigmentation, Nos

Liver

Bile Duct

Focal Cellular Change
Hepatitis, Toxic
Hyperplasia, Nos
Inflammation, Suppurative

Lung
Lymph node

Mediastinal Lymph Node
Mesenteric Lymph Node

Inflammation, Chronic
Pigmentation, Nos
Pigmentation, Nos

Mammary gland
Spleen
Thymus
Unspecified

Multiple Organs Nos

Fibroadenoma
Infarct, Nos
Necrosis, Nos
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_178

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|----------------|-----------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Skull | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Cyst, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Chronic |
| | | Necrosis, Focal |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_179

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Intestine Large | Cecum, Colon | Inflammation, Suppurative |
| | Cecum, Colon | Ulcer, Acute |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Pigmentation, Nos |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lung | | Inflammation, Chronic |
| Lymph node | Mesenteric Lymph Node | Lymphangiectasis |
| Mammary gland | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_180

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Angiectasis |
| | | Hyperplasia, Nos |
| | | Metamorphosis, Fatty |
| | | Necrosis, Coagulative |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | Mucosa | Dilatation, Nos |
| | | Inflammation, Acute/Chronic |
| | Mucosa | Necrosis, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_181

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Mammary gland

Focal Cellular Change

Thyroid

Hyperplasia, Nos

Unspecified

Multiple Organs Nos

C-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_182

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Thyroid

Mandibular Lymph Node

Mineralization

Focal Cellular Change

Inflammation, Granulomatous

Hyperplasia, Plasma Cell

Fibroadenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_183

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|------------------------|-----------------------------|
| Adrenal gland | | Pheochromocytoma |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Colon | Parasitism |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Inflammation, Granulomatous |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| | Mesenteric Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Galactocele |
| Parathyroid gland | | C-Cell Carcinoma, Invasive |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Basal-Cell Carcinoma |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_184

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Lymph node

Mediastinal Lymph Node

Focal Cellular Change

Mammary gland

Mesenteric Lymph Node

Pigmentation, Nos

Ovary

Pigmentation, Nos

Thyroid

Fibroadenoma

Unspecified

Multiple Organs Nos

Cyst, Parovarian

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_185

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Kidney | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| Lung | | Inflammation, Chronic |
| Lymph node | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_186

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Clitoral gland

Heart

Kidney

Liver

Pituitary gland

Unspecified

Myocardium Nos

Multiple Organs Nos

Carcinoma, Nos

Fibrosis

Mineralization

Hepatitis, Toxic

Angiectasis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_187

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Kidney

Mammary gland

Pituitary gland

Spleen

Thyroid

Cortical Adenoma

Carcinoma, Nos, Invasive

Cast, Nos

Inflammation, Chronic

Mineralization

Fibroadenoma

Galactocele

Carcinoma, Nos

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_188

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Inflammation, Granulomatous

Metamorphosis, Fatty

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_189

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Inflammation, Acute Focal
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Focal Cellular Change
Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node
Mediastinal Lymph Node

Hemorrhage
Pigmentation, Nos

Spleen

Hematopoiesis

Stomach

Ulcer, Acute

Thyroid

Hyperplasia, C Cell

Unspecified

Fibrosarcoma

Adipose Tissue

Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_190

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Pancreas
Pituitary gland
Unspecified

Atrophy, Nos
Hypertrophy, Focal
Fibroma

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_191

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Spleen

Mandibular Lymph Node

Mesenteric Lymph Node

Mesenteric Lymph Node

Mineralization

Focal Cellular Change

Hemorrhage

Hyperplasia, Reticulum Cell

Pigmentation, Nos

Fibroadenoma

Galactocele

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_192

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Eye

Cortex Nos

Metamorphosis, Fatty

Heart

Retina

Cataract

Kidney

Myocardium Nos

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Nos

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_193

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|----------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Neoplastic Nodule |
| Lung | | Hyperplasia, Alveolar Epithelium |
| Lymph node | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Pituitary gland | | Adenoma, Nos |
| Salivary gland | | Inflammation, Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_194

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|----------------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | Periportal | Fibrosis |
| | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Hyperplasia, Alveolar Epithelium |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Ileocolic Lymph Node | Lymphangiectasis |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_195

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|--------------|------------------------|-------------------------|
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Ovary | | Cyst, Parovarian |
| Spleen | | Hemosiderosis |
| Thyroid | | Cystic Follicles |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_946

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Heart

Retina

Degeneration, Nos

Kidney

Myocardium Nos

Fibrosis

Liver

Cast, Nos

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Focal Cellular Change

Mammary gland

Hepatitis, Toxic

Hyperplasia, Plasma Cell

Stomach

Submucosa

Adenocarcinoma, Nos

Fibroadenoma

Unspecified

Multiple Organs Nos

Edema, Nos

Inflammation, Acute/Chronic

Ulcer, Chronic

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_947

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Large
Kidney

Cortex Nos
Myocardium Nos
Colon

Mammary gland
Spleen
Thyroid
Unspecified

Multiple Organs Nos

Metamorphosis, Fatty
Fibrosis
Parasitism
Mineralization
Pigmentation, Nos
Fibroadenoma
Infarct, Nos
Hyperplasia, C Cell
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_948

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | | Pheochromocytoma |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lung | Alveoli | Histiocytosis |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| | | Angiectasis |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_949

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Liposarcoma

Mineralization

Mammary gland

Hyperplasia, Nos

Parathyroid gland

C-Cell Carcinoma, Invasive

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Thyroid

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_950

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Mammary gland

Pituitary gland

Thyroid

Unspecified

Myocardium Nos

Multiple Organs Nos

Pheochromocytoma

Fibrosis

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Fibroadenoma

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_951

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Mineralization
Pigmentation, Nos

Liver
Lymph node
Mammary gland

Mesenteric Lymph Node

Focal Cellular Change
Pigmentation, Nos
Fibroadenoma
Galactocele
Adenoma, Nos
Hemosiderosis

Pituitary gland
Spleen

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_952

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Clitoral gland | | Carcinoma, Nos |
| Kidney | | Pigmentation, Nos |
| Lymph node | Ileocolic Lymph Node | Hyperplasia, Lymphoid |
| | Mandibular Lymph Node | Hyperplasia, Lymphoid |
| | Mediastinal Lymph Node | Hyperplasia, Lymphoid |
| | Renal Lymph Node | Hyperplasia, Reticulum Cell |
| | Ileocolic Lymph Node | Lymphangiectasis |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | Endometrium | Carcinoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_953

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Adenoma, Nos

Fibroadenoma

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Carcinoma

Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_954

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Pigmentation, Nos

Lung

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Inflammation, Chronic

Mediastinal Lymph Node

Hyperplasia, Plasma Cell

Mesenteric Lymph Node

Pigmentation, Nos

Spleen

Pigmentation, Nos

Thyroid

Hemosiderosis

Uterus

Cystic Follicles

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_955

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Pituitary gland

Unspecified

Uterus

Multiple Organs Nos

Adenoma, Nos

Leukemia, Monocytic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_956

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Bone

Skull

Hyperostosis

Sternum

Hyperostosis

Eye

Cataract

Retina

Degeneration, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Galactocele

Ovary

Cyst, Parovarian

Pituitary gland

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_957

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Pigmentation, Nos
Focal Cellular Change
Inflammation, Granulomatous

Lung

Lymph node

Mandibular Lymph Node

Mesenteric Lymph Node

Pancreatic Lymph Node

Metamorphosis, Fatty
Inflammation, Chronic
Hyperplasia, Lymphoid

Mammary gland

Pigmentation, Nos

Pituitary gland

Spleen

Adenoma, Nos

Fibroadenoma

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_958

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Spleen

Thyroid

Uterus

Cervix Uteri

Hematopoiesis

Follicular-Cell Adenoma

Endometrial Stromal Sarcoma

Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_959

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver
Mammary gland
Pituitary gland
Spleen
Thyroid
Unspecified

Focal Cellular Change
Fibroadenoma
Angiectasis
Hemosiderosis
C-Cell Adenoma
Fibrosarcoma

Scalp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_960

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Spleen

Mediastinal Lymph Node

Mediastinal Lymph Node

Mesenteric Lymph Node

Mineralization

Focal Cellular Change

Inflammation, Granulomatous

Hemorrhage

Pigmentation, Nos

Pigmentation, Nos

Fibroadenoma

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_961

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Intestine Large

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Spleen

Thyroid

Unspecified

Transverse Colon, Colon

Multiple Organs Nos

Pheochromocytoma

Angiectasis

Cast, Nos

Hepatitis, Toxic

Hepatocellular Carcinoma

Inflammation, Chronic

Adenoma, Nos

Adenoma, Nos

Fibrosis

C-Cell Adenoma

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_962

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_963

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Brain

Ventricle

Dilatation, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_964

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Liver

Cast, Nos

Spleen

Pigmentation, Nos

Focal Cellular Change

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_965

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Rib | Chondrodystrophy |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | | Inflammation, Chronic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hyperplasia, Nos |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| Unspecified | Multiple Organs Nos | Ulcer, Perforated |
| Uterus | | Leukemia, Monocytic |
| | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_966

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland

Kidney

Spleen

Thyroid

Carcinoma, Nos

Mineralization

Hematopoiesis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_967

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Pituitary gland

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Metamorphosis, Fatty

Angiectasis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_968

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|------------|---------------------|---------------------------|
| Heart | Pericardium Nos | Inflammation, Suppurative |
| Lung | | Congestion, Nos |
| Lymph node | Thoracic Lymph Node | Congestion, Nos |
| Ovary | | Inflammation, Suppurative |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_969

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | | Cortical Adenoma |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_970

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| | | Neoplastic Nodule |
| Lymph node | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | Submucosa | Edema, Nos |
| Thyroid | | C-Cell Adenoma |
| Urinary bladder | | Inflammation, Granulomatous |
| | | Transitional-Cell Papilloma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_971

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Spleen

Thyroid

Retina

Myocardium Nos

Mandibular Lymph Node

Mediastinal Lymph Node

Cortical Adenoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Mineralization

Focal Cellular Change

Inflammation, Granulomatous

Hyperplasia, Plasma Cell

Pigmentation, Nos

Fibroadenoma

Adenoma, Nos

Hemosiderosis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_972

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lung

Lymph node

Mammary gland

Spleen

Thyroid

Unspecified

Retina

Myocardium Nos

Mediastinal Lymph Node

Axilla

Pheochromocytoma

Cataract

Degeneration, Nos

Fibrosis

Mineralization

Focal Cellular Change

Hyperplasia, Alveolar Epithelium

Inflammation, Chronic

Pigmentation, Nos

Adenoma, Nos

Fibroadenoma

Hemosiderosis

C-Cell Adenoma

Cystic Follicles

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_973

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Adrenal gland | Cortex Nos | Angiectasis |
| | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Fibrosis, Myelo |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_974

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Thyroid

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Metamorphosis, Fatty

Fibroadenoma

C-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_975

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_976

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Unspecified

Uterus

Multiple Organs Nos

Mineralization

Focal Cellular Change

Leukemia, Monocytic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_977

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Bile Duct

Hepatitis, Toxic

Lung

Hyperplasia, Nos

Spleen

Inflammation, Interstitial

Unspecified

Multiple Organs Nos

Infarct, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_978

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|--------------------------|
| Brain | | Astrocytoma |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Lymph node | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Pancreas | Islets | Islet-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_979

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lung | | Adenocarcinoma, Nos, Metastatic |
| | | Inflammation, Interstitial |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Fibroadenoma |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| Stomach | | Hyperplasia, Epithelial |
| | | Inflammation, Acute/Chronic |
| Thyroid | | C-Cell Adenoma |
| | | Cystic Follicles |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_980

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Adenocarcinoma, Nos

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Thyroid

C-Cell Adenoma

Uterus

Endometrium

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_981

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|-----------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Metamorphosis, Fatty |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | Submucosa | Edema, Nos |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_982

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Hypertrophy, Focal
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Bile Duct

Hyperplasia, Nos
Necrosis, Coagulative

Lymph node
Pituitary gland

Mediastinal Lymph Node

Pigmentation, Nos
Adenoma, Nos

Spleen
Thyroid

Hemosiderosis
C-Cell Carcinoma

Unspecified

Axilla

Abscess, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_983

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|-----------------------------|
| Adrenal gland | | Pheochromocytoma |
| Heart | Pericardium Nos | Inflammation, Fibrinous |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | Capsule | Inflammation, Suppurative |
| | | Necrosis, Coagulative |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Hyperplasia, Focal |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_984

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | |
|-----------------|---|
| Kidney | Mineralization |
| | Pigmentation, Nos |
| Liver | Focal Cellular Change |
| Mammary gland | Fibroadenoma |
| Spleen | Hematopoiesis |
| Stomach | Endometrial Stromal Sarcoma, Metastatic |
| | Inflammation, Acute/Chronic |
| Thyroid | Hyperplasia, C Cell |
| Urinary bladder | Crystals, Nos |
| | Hyperplasia, Epithelial |
| | Inflammation, Granulomatous |
| Uterus | Endometrial Stromal Sarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_985

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Chondrodystrophy |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lung | Alveolar Wall | Leukocytosis, Nos |
| Lymph node | Mesenteric Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Skin | Ear | Squamous Cell Papilloma |
| Small intestine | Submucosa | Edema, Nos |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Stomach | | Acanthosis |
| | Submucosa | Edema, Nos |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_986

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------|---|
| Kidney | | Mineralization |
| Liver | Hepatic Sinusoid | Leukocytosis, Nos Metamorphosis, Fatty |
| Lung | Alveolar Wall | Leukocytosis, Nos |
| Mammary gland | | Fibroadenoma Galactocele |
| Pituitary gland | | Angiectasis |
| Spleen | | Hematopoiesis |
| Unspecified | | Fibrosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_987

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Liver

Mammary gland

Ovary

Pituitary gland

Thyroid

Retina

Pheochromocytoma

Cataract

Degeneration, Nos

Cast, Nos

Inflammation, Chronic

Mineralization

Focal Cellular Change

Fibroadenoma

Galactocele

Cyst, Nos

Adenoma, Nos

Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_988

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Mammary gland

Adenoma, Nos

Pituitary gland

Galactocele

Spleen

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_989

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|---------------------------|
| Adrenal gland | Cortex Nos | Hyperplasia, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Lymph node | Cervical Lymph Node Nos | Hemorrhage |
| | Mandibular Lymph Node | Hemorrhage |
| | Cervical Lymph Node Nos | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Cervical Lymph Node Nos | Inflammation, Suppurative |
| | Mandibular Lymph Node | Inflammation, Suppurative |
| | Cervical Lymph Node Nos | Lymphangiectasis |
| | Mandibular Lymph Node | Lymphangiectasis |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Salivary gland | | Abscess, Chronic |
| Spleen | | Hemosiderosis |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_990

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|---------------------|----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Metamorphosis, Fatty |
| Ovary | | Cyst, Parovarian |
| Stomach | | Acanthosis |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_991

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Fibrosis

Kidney

Mineralization

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_992

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney
Unspecified
Urinary bladder

Multiple Organs Nos

Mineralization
Leukemia, Monocytic
Hemorrhage

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_993

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|------------------------------|
| Bone | Sternum | Hyperostosis |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Hepatitis, Toxic |
| | | Hyperplasia, Nos |
| Lung | | Alveolar/Bronchiolar Adenoma |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_994

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-------------------------|---------------------------------------|
| Kidney | | Mineralization |
| Larynx | | C-Cell Carcinoma, Invasive |
| | | Follicular-Cell Carcinoma, Invasive |
| Liver | | Focal Cellular Change |
| Lung | | C-Cell Carcinoma, Metastatic |
| | | Follicular-Cell Carcinoma, Metastatic |
| Lymph node | Cervical Lymph Node Nos | C-Cell Carcinoma, Metastatic |
| | Cervical Lymph Node Nos | Follicular-Cell Carcinoma, Metastatic |
| Mammary gland | | Fibroadenoma |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_995

TRT#: 3
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Angiectasis |
| | Cortex Nos | Metamorphosis, Fatty |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Inflammation, Granulomatous |
| | | Pigmentation, Nos |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Ovary | | Cyst, Parovarian |
| | | Granulosa-Cell Tumor |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_996

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Large
Kidney

Cortex Nos
Myocardium Nos
Descending, Colon

Metamorphosis, Fatty
Fibrosis
Diverticulum
Cast, Nos
Cyst, Nos

Liver
Lung
Lymph node

Mediastinal Lymph Node
Mandibular Lymph Node
Mediastinal Lymph Node

Inflammation, Chronic
Focal Cellular Change
Inflammation, Chronic
Hemorrhage
Hyperplasia, Plasma Cell
Pigmentation, Nos

Mammary gland
Pancreas
Spleen
Thyroid
Unspecified

Fibroadenoma
Atrophy, Nos
Hemosiderosis
C-Cell Adenoma
Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_997

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|---------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_998

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------|
| Bone | Sternum | Hyperostosis |
| Brain | Ventricle | Dilatation, Nos |
| Clitoral gland | | Carcinoma, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| Stomach | | Acanthosis |
| | | Hyperkeratosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_999

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Focal Cellular Change
Hepatitis, Toxic

Lung
Lymph node

Pancreatic Lymph Node
Mandibular Lymph Node

Inflammation, Chronic
Hemorrhage
Hyperplasia, Plasma Cell

Pituitary gland
Unspecified

Multiple Organs Nos

Angiectasis
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_371

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Thyroid

Unspecified

Multiple Organs Nos

Mineralization

Focal Cellular Change

Neoplastic Nodule

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_372

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|--------|-------------|-----------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Spleen | | Hemosiderosis |
| Uterus | Endometrium | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_373

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Intestine Small

Colon

Parasitism

Kidney

Ileum, Ileum

Adenocarcinoma In Adenomatous Polyp

Liver

Cast, Nos

Mineralization

Pituitary gland

Mixed Tumor, Malignant

Spleen

Focal Cellular Change

Thyroid

Hepatocellular Carcinoma

Unspecified

Angiectasis

Hematopoiesis

C-Cell Carcinoma

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_374

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos
Mineralization

Liver

Focal Cellular Change
Hepatitis, Toxic

Lymph node
Mammary gland
Pituitary gland
Thyroid

Mediastinal Lymph Node

Pigmentation, Nos
Hyperplasia, Nos
Adenoma, Nos
Follicular-Cell Adenoma

Unspecified
Zymbal gland

Multiple Organs Nos

Hyperplasia, C Cell
Leukemia, Monocytic
Dilatation, Ducts
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_375

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Bone

Intestine Large

Kidney

Liver

Mammary gland

Pituitary gland

Spleen

Unspecified

Skull

Sternum

Descending, Colon

Multiple Organs Nos

Pigmentation, Nos

Hyperostosis

Hyperostosis

Adenomatous Polyp, Nos

Cast, Nos

Mineralization

Hepatitis, Toxic

Adenoma, Nos

Adenoma, Nos

Hemosiderosis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_376

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | |
|--------|-------------------------|
| Heart | Mixed Tumor, Metastatic |
| Kidney | Mixed Tumor, Malignant |
| Lung | Mixed Tumor, Metastatic |
| Spleen | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_377

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------------------|
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Neoplastic Nodule |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Sarcoma |
| | Cervix Uteri | Endometrial Stromal Sarcoma, Invasive |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_378

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Mixed Tumor, Malignant

Lymph node

Mediastinal Lymph Node

Metamorphosis, Fatty

Pituitary gland

Mediastinal Lymph Node

Hemorrhage

Spleen

Lymphangiectasis

Adenoma, Nos

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_379

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Cyst, Nos |
| | | Hyperplasia, Nos |
| Lymph node | Mediastinal Lymph Node | Hyperplasia, Reticulum Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Spleen | | Fibrosis, Focal |
| | | Hematopoiesis |
| Stomach | | Inflammation, Chronic |
| | | Ulcer, Chronic |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_380

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland
Intestine Large
Kidney

Descending, Colon

Carcinoma, Nos
Adenomatous Polyp, Nos
Cast, Nos
Mineralization

Liver
Lung
Lymph node

Mesenteric Lymph Node
Mediastinal Lymph Node

Focal Cellular Change
Inflammation, Chronic
Hyperplasia, Reticulum Cell
Pigmentation, Nos

Pancreas
Thyroid

Atrophy, Nos
C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_381

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Intestine Small

Mesentery Nos

Mixed Tumor, Invasive

Kidney

Mixed Tumor, Malignant

Lung

Inflammation, Chronic

Pancreas

Mixed Tumor, Invasive

Spleen

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_382

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Bone

Sternum

Hyperostosis

Kidney

Cast, Nos

Inflammation, Chronic

Liver

Cyst, Nos

Hepatitis, Toxic

Lung

Alveolar/Bronchiolar Adenoma

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Fibrosis

Hemosiderosis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_383

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Liver

Myocardium Nos

Lymph node

Mammary gland

Spleen

Thyroid

Unspecified

Uterus

Mediastinal Lymph Node

Multiple Organs Nos

Endometrium

Pheochromocytoma

Inflammation, Chronic

Hepatitis, Toxic

Neoplastic Nodule

Pigmentation, Nos

Fibroadenoma

Hemosiderosis

Hyperplasia, C Cell

Leukemia, Monocytic

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_384

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lymph node

Unspecified

Mediastinal Lymph Node

Multiple Organs Nos

Pheochromocytoma

Cast, Nos

Mineralization

Focal Cellular Change

Pigmentation, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_385

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney
Liver

Descending, Colon

Cortical Adenoma
Adenomatous Polyp, Nos
Mineralization
Hepatitis, Toxic
Inflammation, Chronic
Neoplastic Nodule
Inflammation, Chronic
Adenoma, Nos
Leukemia, Monocytic
Hyperplasia, Cystic
Squamous Cell Carcinoma

Lung
Pituitary gland
Unspecified
Uterus
Zymbal gland

Multiple Organs Nos
Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_386

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Hepatitis, Toxic

Pigmentation, Nos

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_387

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Ascending Colon, Colon

Mucinous Cystadenocarcinoma

Cast, Nos

Mineralization

Liver

Focal Cellular Change

Mammary gland

Fibroadenoma

Pancreas

Inflammation, Chronic

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_388

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Inflammation, Chronic Focal
Mixed Tumor, Malignant

Liver

Bile Duct
Hepatic Sinusoid
Mediastinal Lymph Node

Hyperplasia, Nos
Leukocytosis, Nos
Pigmentation, Nos

Lymph node
Pituitary gland

Uterus

Endometrium

Cyst, Nos
Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_389

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Pituitary gland

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_390

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|----------------------------------|
| Brain | | Carcinoma, Nos, Invasive |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Mixed Tumor, Malignant |
| Liver | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| | | Inflammation, Chronic |
| | | Metamorphosis, Fatty |
| Lung | | Hyperplasia, Alveolar Epithelium |
| Lymph node | Mandibular Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pancreas | Islets | Hyperplasia, Nos |
| Pituitary gland | | Carcinoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute/Chronic |
| | | Necrosis, Nos |
| Urinary bladder | | Inflammation, Granulomatous |
| Uterus | Endometrium | Adenoma, Nos |
| | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_391

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Bone | Sternum | Osteochondrodystrophy |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Angiectasis |
| | | Cyst, Nos |
| | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Adenoma |
| | | Follicular-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_392

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenocarcinoma In Adenomatous Polyp

Kidney

Descending, Colon

Adenomatous Polyp, Nos

Liver

Cast, Nos

Mineralization

Focal Cellular Change

Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_393

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Clitoral gland

Intestine Large

Kidney

Liver

Unspecified

Uterus

Colon

Colon

Multiple Organs Nos

Carcinoma, Nos

Adenomatous Polyp, Nos

Parasitism

Cast, Nos

Mineralization

Focal Cellular Change

Leukemia, Monocytic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_394

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye

Cortex Nos

Metamorphosis, Fatty
Cataract

Intestine Large
Kidney

Retina
Transverse Colon, Colon

Degeneration, Nos
Adenomatous Polyp, Nos

Liver
Pituitary gland

Spleen
Stomach

Cast, Nos
Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Adenoma, Nos

Hemosiderosis

Acanthosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_395

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenocarcinoma In Adenomatous Polyp

Kidney

Mineralization

Liver

Focal Cellular Change

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_396

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hypertrophy, Focal

Eye

Retina

Metamorphosis, Fatty

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Inflammation, Chronic

Cast, Nos

Liver

Bile Duct

Mineralization

Pigmentation, Nos

Focal Cellular Change

Lung

Hyperplasia, Nos

Mammary gland

Inflammation, Granulomatous

Inflammation, Chronic

Thyroid

Fibroadenoma

Galactocele

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_397

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|-----------------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Colon | Inflammation, Acute/Chronic |
| | Colon | Ulcer, Chronic |
| Kidney | | Mineralization |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Lymph node | Cervical Lymph Node Nos | Pigmentation, Nos |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Celiac Lymph Node | Signet Ring Carcinoma, Metastatic |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_398

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Lung

Spleen

Mineralization

Inflammation, Chronic

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_399

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Bile Duct Adenoma

Focal Cellular Change

Hepatocellular Carcinoma

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_400

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Diverticulum

Liver

Hepatitis, Toxic

Mammary gland

Fibroadenoma

Galactocele

Unspecified

Multiple Organs Nos

Lymphoma, Undifferentiated-Malignant Type

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_401

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Brain | | Astrocytoma |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_402

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland

Carcinoma, Nos

Kidney

Cast, Nos

Mineralization

Liver

Cyst, Nos

Focal Cellular Change

Hematopoiesis

Lymph node

Mandibular Lymph Node

Hepatocellular Carcinoma

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Lymphangiectasis

Spleen

Pigmentation, Nos

Thyroid

Hematopoiesis

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_403

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Liver

Hepatitis, Toxic

Lymph node

Mediastinal Lymph Node

Hemorrhage

Ovary

Cyst, Parovarian

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_404

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|---------------------------|
| Kidney | | Pyelonephritis, Acute |
| Liver | | Hepatitis, Toxic |
| Lymph node | Celiac Lymph Node | Inflammation, Suppurative |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_405

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

Uterus

Cervix Uteri

Leiomyosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_406

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Mineralization

Liver

Hepatitis, Toxic

Neoplastic Nodule

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Angiectasis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_407

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|---------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Spleen | | Fibrosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Inflammation, Suppurative |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_408

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_409

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---|
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| | Ascending Colon, Colon | Mucinous Cystadenocarcinoma |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Cyst, Nos |
| | | Focal Cellular Change |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Mucinous Cystadenocarcinoma, Metastatic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_410

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Atrophy, Nos

Eye

Cortical Carcinoma

Retina

Pheochromocytoma, Malignant

Intestine Large

Ascending Colon, Colon

Cataract

Degeneration, Nos

Kidney

Adenocarcinoma, Nos

Mineralization

Pigmentation, Nos

Liver

Hepatitis, Toxic

Hyperplasia, Nos

Lung

Pheochromocytoma, Metastatic

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Skin

Basal-Cell Tumor

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_411

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Liver

Cast, Nos

Pituitary gland

Mineralization

Thyroid

Focal Cellular Change

Unspecified

Multiple Organs Nos

Adenoma, Nos

Cystic Follicles

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_412

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Intestine Large | Ascending Colon, Colon | Adenomatous Polyp, Nos |
| Intestine Small | Mesentery Nos | Necrosis, Fat |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Cyst, Nos |
| | | Hepatitis, Toxic |
| | | Neoplastic Nodule |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Fibrosis |
| | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Adipose Tissue | Inflammation, Chronic |
| | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_413

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

Liver

Focal Cellular Change

Lymph node

Bile Duct

Hyperplasia, Nos

Mediastinal Lymph Node

Hemorrhage

Mediastinal Lymph Node

Pigmentation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_414

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Mammary gland | | Hyperplasia, Nos |
| Pituitary gland | | Angiectasis |
| Spleen | | Hemosiderosis |
| Stomach | | Necrosis, Focal |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Perineum | Fibrosarcoma |
| Urinary bladder | | Hyperplasia, Epithelial |
| | | Inflammation, Acute/Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_415

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos

Liver

Mineralization

Hepatitis, Toxic

Lung

Hyperplasia, Nos

Hyperplasia, Alveolar Epithelium

Lymph node

Mandibular Lymph Node

Lymphangiectasis

Unspecified

Perineum

Fibroma

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_416

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Mucinous Cystadenocarcinoma

Kidney

Mineralization

Lymph node

Mandibular Lymph Node

Congestion, Nos

Stomach

Inflammation, Acute/Chronic

Ulcer, Acute

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_417

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos

Lung
Lymph node
Pituitary gland
Thyroid

Mediastinal Lymph Node

Mineralization
Inflammation, Chronic
Hemorrhage
Angiectasis
Cystic Follicles

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_418

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Unspecified

Multiple Organs Nos

Leukemia, Myelomonocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_419

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|-----------------------------|
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mandibular Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Hyperplasia, Reticulum Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_420

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Heart

Myocardium Nos

Degeneration, Nos

Intestine Large

Descending, Colon

Fibrosis

Kidney

Adenomatous Polyp, Nos

Liver

Mixed Tumor, Malignant

Lymph node

Mesenteric Lymph Node

Focal Cellular Change

Mammary gland

Metamorphosis, Fatty

Pituitary gland

Pigmentation, Nos

Spleen

Adenocarcinoma, Nos

Hyperplasia, Focal

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_421

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|---------------------|
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 4_422

TRT#: 4
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|---|---|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty Pheochromocytoma |
| Kidney | | Cast, Nos Mineralization |
| Liver | | Cyst, Nos Hepatitis, Toxic |
| Lung | | Fibrosis Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node Pancreatic Lymph Node | Pigmentation, Nos Pigmentation, Nos |
| Mammary gland | | Fibroadenoma Galactocele |
| Ovary | | Cyst, Parovarian |
| Stomach | Submucosa | Edema, Nos Inflammation, Acute/Chronic Ulcer, Acute |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_423

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------------|------------------------|
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Large | Transverse Colon, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| | | Inflammation, Chronic |
| Lymph node | Pancreatic Lymph Node | Pigmentation, Nos |
| Ovary | | Cyst, Nos |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_424

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Intestine Large

Colon

Parasitism

Kidney

Mineralization

Liver

Hepatitis, Toxic

Hepatocellular Carcinoma

Bile Duct

Hyperplasia, Nos

Pituitary gland

Cyst, Nos

Hyperplasia, Focal

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_425

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|---------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Cyst, Nos |
| Liver | | Angiectasis |
| | | Cyst, Nos |
| | | Hepatitis, Toxic |
| | | Hyperplasia, Nos |
| | | Pigmentation, Nos |
| Lymph node | Pancreatic Lymph Node | Hemorrhage |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Hyperplasia, Focal |
| Thyroid | | Cystic Follicles |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_426

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Cortical Adenoma

Bone

Sternum

Hyperplasia, Focal

Intestine Large

Descending, Colon

Hyperostosis

Kidney

Adenomatous Polyp, Nos

Cast, Nos

Liver

Mineralization

Lymph node

Mediastinal Lymph Node

Hepatitis, Toxic

Mammary gland

Hyperplasia, Reticulum Cell

Fibroadenoma

Pituitary gland

Galactocele

Stomach

Adenoma, Nos

Inflammation, Chronic

Thyroid

Ulcer, Chronic

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Zymbal gland

Leukemia, Monocytic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_427

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Bone | Sternum | Hyperostosis |
| Intestine Large | Ascending Colon, Colon | Adenomatous Polyp, Nos |
| Kidney | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| Lymph node | Pancreatic Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Angiectasis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_428

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Intestine Small
Kidney
Liver

Descending, Colon
Duodenum

Adenomatous Polyp, Nos
Signet Ring Carcinoma
Mineralization
Cyst, Nos
Necrosis, Coagulative
Neoplastic Nodule
Hyperplasia, Plasma Cell
Lymphangiectasis
Hyperplasia, Nos
Adenoma, Nos
C-Cell Carcinoma
Signet Ring Carcinoma, Metastatic

Lymph node

Mandibular Lymph Node
Mandibular Lymph Node

Mammary gland
Pituitary gland
Thyroid
Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_429

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Unspecified

Multiple Organs Nos

Mixed Tumor, Malignant

Abdominal Wall Nos

Leukemia, Monocytic

Mixed Tumor, Invasive

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_430

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Small
Kidney

Duodenum

Mucinous Cystadenocarcinoma

Cast, Nos

Mineralization

Liver
Mammary gland
Thyroid

Hepatitis, Toxic

Fibroadenoma

C-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrium

Cyst, Nos

Vagina

Hyperplasia, Stromal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_431

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Pituitary gland

Spleen

Unspecified

Chest

Abdominal Cavity

Mineralization

Focal Cellular Change

Metamorphosis, Fatty

Necrosis, Coagulative

Adenoma, Nos

Hematopoiesis

Carcinoma, Nos

Steatitis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_432

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Kidney

Cortex Nos

Metamorphosis, Fatty

Liver

Cast, Nos

Mineralization

Lung

Focal Cellular Change

Inflammation, Granulomatous

Mammary gland

Inflammation, Chronic

Pituitary gland

Fibroadenoma

Thyroid

Adenoma, Nos

Zymbal gland

Hyperplasia, C Cell

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_433

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Descending, Colon

Adenomatous Polyp, Nos
Mixed Tumor, Malignant
Focal Cellular Change
Neoplastic Nodule

Lymph node

Mandibular Lymph Node
Mandibular Lymph Node
Mesenteric Lymph Node

Hemorrhage
Hyperplasia, Plasma Cell
Pigmentation, Nos
Pigmentation, Nos
Hyperplasia, C Cell

Pituitary gland
Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_434

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenomatous Polyp, Nos

Liver

Cecum, Colon

Mucinous Cystadenocarcinoma

Mammary gland

Necrosis, Coagulative

Unspecified

Fibroadenoma

Uterus

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

Endometrium

Hyperplasia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_435

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Kidney

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Granulomatous

Hyperplasia, Alveolar Epithelium

Lymph node

Mediastinal Lymph Node

Inflammation, Interstitial

Thyroid

Pigmentation, Nos

Cyst, Nos

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_436

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Inflammation, Granulomatous

Liver

Focal Cellular Change

Pituitary gland

Adenoma, Nos

Unspecified

Groin

Abscess, Chronic

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:15
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 4_437

TRT#: 4
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-------------------------|
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Angiectasis |
| | | Focal Cellular Change |
| Lymph node | Mesenteric Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| | | Follicular-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_438

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mineralization

Focal Cellular Change

Hyperplasia, Nos

Metamorphosis, Fatty

Thyroid

Unspecified

Multiple Organs Nos

Follicular-Cell Carcinoma

Lymphoma, Undifferentiated-Malignant Type

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_439

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Congestion, Nos

Kidney

Metamorphosis, Fatty

Liver

Mineralization

Unspecified

Multiple Organs Nos

Hepatitis, Toxic

Uterus

Leukemia, Monocytic

Vagina

Endometrial Stromal Sarcoma

Endometrial Stromal Sarcoma, Invasive

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_440

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Mucinous Cystadenocarcinoma

Kidney

Mineralization

Liver

Hepatitis, Toxic

Pituitary gland

Congestion, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_441

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Intestine Large

Liver

Pituitary gland

Thyroid

Unspecified

Colon

Cecum, Colon

Multiple Organs Nos

Multiple Organs Nos

Pheochromocytoma

Inflammation, Chronic

Mucinous Cystadenocarcinoma

Angiectasis

Hyperplasia, Nos

Neoplastic Nodule

Adenoma, Nos

C-Cell Adenoma

Leukemia, Monocytic

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_442

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos
Cast, Nos

Liver

Mineralization
Pigmentation, Nos
Angiectasis
Cyst, Nos

Mammary gland

Hepatitis, Toxic
Neoplastic Nodule
Fibroadenoma
Galactocele

Thyroid
Unspecified

Multiple Organs Nos

Hyperplasia, C Cell
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_443

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Cast, Nos

Liver

Inflammation, Chronic

Focal Cellular Change

Lung

Hepatitis, Toxic

Liposarcoma, Metastatic

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_444

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mixed Tumor, Malignant

Liver

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Spleen

Hematopoiesis

Stomach

Acanthosis

Inflammation, Acute

Uterus

Ulcer, Chronic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_445

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Congestion, Nos

Intestine Small

Ileum

Metamorphosis, Fatty

Kidney

Mucinous Cystadenocarcinoma

Liver

Mineralization

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Necrosis, Coagulative

Spleen

Congestion, Nos

Unspecified

Multiple Organs Nos

Hematopoiesis

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_446

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Spleen

Stomach

Mixed Tumor, Malignant

Hematopoiesis

Inflammation, Chronic

Ulcer, Acute

Unspecified

Adipose Tissue

Mixed Tumor, Invasive

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_447

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Liver

Pituitary gland

Spleen

Unspecified

Retina

Multiple Organs Nos

Cortical Adenoma

Cataract

Degeneration, Nos

Cast, Nos

Focal Cellular Change

Hepatitis, Toxic

Hepatocellular Carcinoma

Adenoma, Nos

Fibrosis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_448

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Inflammation, Chronic

Kidney

Transverse Colon, Colon

Mucinous Cystadenocarcinoma

Liver

Mixed Tumor, Malignant

Inflammation, Chronic

Lymph node

Celiac Lymph Node

Metamorphosis, Fatty

Unspecified

Adipose Tissue

Mucinous Cystadenocarcinoma, Metastatic

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_449

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Degeneration, Cystic
Hepatitis, Toxic
Hyperplasia, Nos
Pigmentation, Nos
Pigmentation, Nos
Leukemia, Monocytic

Lymph node

Mediastinal Lymph Node

Pancreatic Lymph Node

Unspecified

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_450

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Pigmentation, Nos

Lung

Focal Cellular Change

Pituitary gland

Inflammation, Interstitial

Thyroid

Adenoma, Nos

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Follicular-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_451

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Mucinous Cystadenocarcinoma

Kidney

Mineralization

Liver

Necrosis, Coagulative

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_452

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-------------------------|
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| | | Neoplastic Nodule |
| Pituitary gland | | Angiectasis |
| Salivary gland | | Abscess, Chronic |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_453

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Hepatitis, Toxic
Neoplastic Nodule

Mammary gland

Fibroadenoma

Pituitary gland

Angiectasis

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_454

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large

Cortex Nos
Ascending Colon, Colon
Ascending Colon, Colon

Kidney

Metamorphosis, Fatty
Adenocarcinoma, Nos
Parasitism

Liver

Cast, Nos
Mineralization
Degeneration, Cystic
Hepatitis, Toxic

Lymph node

Mandibular Lymph Node
Mediastinal Lymph Node

Hyperplasia, Nos
Hyperplasia, Plasma Cell
Pigmentation, Nos

Pancreas

Atrophy, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_455

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Hypertrophy, Focal |
| Heart | | Neurilemoma |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Galactocele |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Angiectasis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Cervix Uteri | Endometrial Stromal Sarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_456

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Ascending Colon, Colon

Mucinous Cystadenocarcinoma
Mineralization
Hepatitis, Toxic
Hepatocellular Carcinoma
Neoplastic Nodule
Pigmentation, Nos
C-Cell Adenoma
Leukemia, Monocytic

Lymph node
Thyroid
Unspecified

Mediastinal Lymph Node

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:15

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_457

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Metamorphosis, Fatty

Lymph node

Mesenteric Lymph Node

Pigmentation, Nos

Pancreatic Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_458

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Pituitary gland

Spleen

Thyroid

Zymbal gland

Cervical Lymph Node Nos

Mandibular Lymph Node

Mineralization

Focal Cellular Change

Hyperplasia, Plasma Cell

Hyperplasia, Plasma Cell

Cyst, Nos

Hemosiderosis

Follicular-Cell Adenoma

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_459

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

Liver

Hepatocytomegaly

Lung

Mixed Tumor, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_460

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|------------------------|
| Bone | Sternum | Hyperostosis |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Hepatitis, Toxic |
| | | Neoplastic Nodule |
| Mammary gland | | Galactocele |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Cyst, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_461

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lymph node

Mammary gland

Mandibular Lymph Node

Cortical Adenoma

Mineralization

Angiectasis

Lymphangiectasis

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_462

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Retina

Pheochromocytoma

Degeneration, Nos

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Hepatocellular Carcinoma

Bile Duct

Hyperplasia, Nos

Fibroadenoma

Mammary gland

Pituitary gland

Skin

Adenoma, Nos

Keratoacanthoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_463

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|----------------|---------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Spleen | | Hematopoiesis |
| Unspecified | Diaphragm Nos | Hernia, Nos |
| | Adipose Tissue | Mixed Tumor, Invasive |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_464

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Adenomatous Polyp, Nos
Mineralization
Pigmentation, Nos

Liver

Cyst, Nos
Focal Cellular Change
Hepatocellular Carcinoma

Lung
Lymph node
Thyroid

Ileocolic Lymph Node

Inflammation, Chronic
Lymphangiectasis
C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_465

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Lung

Ascending Colon, Colon

Mucinous Cystadenocarcinoma
Congestion, Nos
Inflammation, Chronic

Lymph node

Mediastinal Lymph Node

Mucinous Cystadenocarcinoma, Metastatic

Unspecified

Mediastinum Nos

Mucinous Cystadenocarcinoma, Metastatic

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_466

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Small
Kidney
Liver

Duodenum

Mucinous Cystadenocarcinoma

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Lung
Lymph node
Mammary gland
Pituitary gland

Alveoli

Histiocytosis

Mediastinal Lymph Node

Pigmentation, Nos

Hyperplasia, Nos

Unspecified
Zymbal gland

Multiple Organs Nos

Angiectasis

Leukemia, Monocytic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_467

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Descending, Colon

Adenomatous Polyp, Nos

Cast, Nos

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Pituitary gland

Hypertrophy, Focal

Spleen

Hemosiderosis

Thyroid

C-Cell Adenoma

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_468

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Transverse Colon, Colon

Adenocarcinoma In Adenomatous Polyp

Cast, Nos

Liver

Mineralization

Focal Cellular Change

Thyroid

Inflammation, Granulomatous

Uterus

Hyperplasia, C Cell

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_469

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye
Heart
Intestine Large
Kidney

Liver

Lymph node
Pituitary gland
Zymbal gland

Cortex Nos

Myocardium Nos
Colon

Pancreatic Lymph Node

Metamorphosis, Fatty
Cataract
Fibrosis
Parasitism
Cast, Nos
Mineralization
Angiectasis
Degeneration, Cystic
Focal Cellular Change
Inflammation, Chronic
Inflammation, Granulomatous
Metamorphosis, Fatty
Pigmentation, Nos
Angiectasis
Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_470

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Adenomatous Polyp, Nos

Kidney

Ascending Colon, Colon

Mucinous Cystadenocarcinoma

Liver

Cast, Nos

Inflammation, Chronic Focal

Pigmentation, Nos

Lymph node

Ileocolic Lymph Node

Hepatitis, Toxic

Hepatocellular Carcinoma

Mammary gland

Lymphangiectasis

Fibroadenoma

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Skin

Keratoacanthoma

Thyroid

Follicular-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_471

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Pigmentation, Nos

Pituitary gland

Focal Cellular Change

Thyroid

Hepatitis, Toxic

Adenoma, Nos

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Cystic Follicles

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_472

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Hepatitis, Toxic

Hepatocellular Carcinoma

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Thyroid

Pigmentation, Nos

Follicular-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_473

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Cast, Nos

Liver

Mineralization

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Hemorrhage

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Follicular-Cell Carcinoma

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_474

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Unspecified

Zymbal gland

Bile Duct

Mediastinal Lymph Node

Multiple Organs Nos

Congestion, Nos

Cast, Nos

Mineralization

Focal Cellular Change

Hyperplasia, Nos

Inflammation, Granulomatous

Pigmentation, Nos

Fibroadenoma

Adenoma, Nos

Leukemia, Monocytic

Abscess, Chronic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_475

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon

Signet Ring Carcinoma

Kidney

Mixed Tumor, Malignant

Lung

Inflammation, Chronic

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_476

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|--------------|-------------|-------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Lung | | Inflammation, Chronic |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | Submucosa | Edema, Nos |
| Uterus | Endometrium | Cyst, Nos |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_477

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_478

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Kidney

Cortex Nos

Metamorphosis, Fatty

Liver

Cast, Nos

Mineralization

Mammary gland

Focal Cellular Change

Pituitary gland

Fibroadenoma

Thyroid

Angiectasis

Unspecified

Multiple Organs Nos

C-Cell Adenoma

Uterus

Endometrium

Leukemia, Monocytic

Zymbal gland

Cyst, Nos

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_479

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

Liver

Mixed Tumor, Metastatic

Lymph node

Mediastinal Lymph Node

Neoplastic Nodule

Ovary

Pigmentation, Nos

Pancreas

Cyst, Parovarian

Pituitary gland

Mixed Tumor, Metastatic

Spleen

Cyst, Nos

Stomach

Hematopoiesis

Acanthosis

Inflammation, Acute/Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_480

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Adenomatous Polyp, Nos
Cast, Nos
Mineralization

Pituitary gland
Thyroid

Pigmentation, Nos
Follicular-Cell Adenoma
Hyperplasia, C Cell

Unspecified
Uterus

Multiple Organs Nos

Leukemia, Monocytic
Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_481

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Colon

Mucinous Cystadenocarcinoma

Kidney

Mineralization

Liver

Focal Cellular Change

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_482

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|--------------------------|
| Eye | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| Liver | | Hepatitis, Toxic |
| | | Hepatocellular Carcinoma |
| | | Neoplastic Nodule |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| | | Cyst, Nos |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| | Abdominal Cavity | Necrosis, Fat |
| | Abdominal Cavity | Steatitis |
| Uterus | Endometrium | Hyperplasia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_483

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney
Liver
Unspecified
Uterus

Cortex Nos
Descending, Colon

Multiple Organs Nos

Metamorphosis, Fatty
Adenomatous Polyp, Nos
Mineralization
Hepatitis, Toxic
Leukemia, Monocytic
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_484

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Kidney

Degeneration, Nos

Liver

Cast, Nos

Angiectasis

Degeneration, Cystic

Pituitary gland

Focal Cellular Change

Thyroid

Adenoma, Nos

Unspecified

Multiple Organs Nos

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_485

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|--------|-----------------------------|
| Eye | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| | | Inflammation, Granulomatous |
| Mammary gland | | Adenoma, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_486

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Lymph node

Spleen

Mediastinal Lymph Node

Mixed Tumor, Malignant

Pigmentation, Nos

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_487

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mineralization

Lung

Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_488

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Intestine Large

Retina

Degeneration, Nos

Descending, Colon

Adenocarcinoma In Adenomatous Polyp

Descending, Colon

Adenomatous Polyp, Nos

Liver

Focal Cellular Change

Thyroid

Hyperplasia, C Cell

Unspecified

Diaphragm Nos

Hernia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_489

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Hepatitis, Toxic

Neoplastic Nodule

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrium

Papillary Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_490

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Small

Duodenum

Signet Ring Carcinoma

Kidney

Mineralization

Liver

Hepatocellular Carcinoma

Lymph node

Mediastinal Lymph Node

Inflammation, Suppurative

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Unspecified

Multiple Organs Nos

Signet Ring Carcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_491

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lymph node

Pituitary gland

Thyroid

Unspecified

Uterus

Mediastinal Lymph Node

Multiple Organs Nos

Pheochromocytoma

Cast, Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Neoplastic Nodule

Pigmentation, Nos

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_492

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Unspecified

Zymbal gland

Mediastinal Lymph Node

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Pigmentation, Nos

Leukemia, Monocytic

Abscess, Chronic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_493

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Intestine Large

Kidney

Liver

Lymph node

Pituitary gland

Uterus

Zymbal gland

Retina

Transverse Colon, Colon

Mandibular Lymph Node

Mediastinal Lymph Node

Pheochromocytoma

Cataract

Degeneration, Nos

Adenocarcinoma In Adenomatous Polyp

Cast, Nos

Mineralization

Focal Cellular Change

Inflammation, Chronic

Hemorrhage

Mineralization

Adenoma, Nos

Endometrial Stromal Polyp

Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_494

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Hepatocellular Carcinoma |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Uterus | Endometrium | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_495

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Small

Lymph node

Mesentery Nos

Mandibular Lymph Node

Mediastinal Lymph Node

Mandibular Lymph Node

Congestion, Nos

Congestion, Nos

Congestion, Nos

Hyperplasia, Plasma Cell

Ovary

Unspecified

Zymbal gland

Multiple Organs Nos

Inflammation, Suppurative

Leukemia, Monocytic

Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_496

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Mammary gland

Focal Cellular Change

Galactocele

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_497

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver
Lung
Mammary gland

Transverse Colon, Colon

Adenomatous Polyp, Nos
Mixed Tumor, Malignant
Focal Cellular Change
Mixed Tumor, Metastatic
Fibroadenoma

Spleen
Stomach

Submucosa

Galactocele
Hematopoiesis
Acanthosis
Edema, Nos
Inflammation, Acute/Chronic
Ulcer, Acute
Follicular-Cell Adenoma
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_498

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mixed Tumor, Malignant |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| | | Hyperplasia, Nos |
| Thyroid | | C-Cell Adenoma |
| | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_499

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| Liver | | Cyst, Nos |
| | | Hepatitis, Toxic |
| Mammary gland | | Fibroadenoma |
| Ovary | | Cyst, Parovarian |
| | | Granulosa-Cell Tumor |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Cervix Uteri | Cyst, Nos |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_500

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye
Intestine Large
Liver

Retina
Cecum, Colon
Bile Duct

Degeneration, Nos
Mucinous Cystadenocarcinoma
Hyperplasia, Nos
Hyperplasia, Nos
Mucinous Cystadenocarcinoma, Metastatic
Adenoma, Nos

Unspecified
Zymbal gland

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_501

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenocarcinoma In Adenomatous Polyp

Ascending Colon, Colon

Adenomatous Polyp, Nos

Transverse Colon, Colon

Adenomatous Polyp, Nos

Kidney

Mineralization

Liver

Focal Cellular Change

Pituitary gland

Angiectasis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_502

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon

Adenomatous Polyp, Nos

Descending, Colon

Adenomatous Polyp, Nos

Kidney

Mixed Tumor, Malignant

Liver

Focal Cellular Change

Uterus

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_503

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland

Carcinoma, Nos

Heart

Myocardium Nos

Dilatation, Ducts

Kidney

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Liver

Hemangiosarcoma

Lung

Hemangiosarcoma, Metastatic

Mammary gland

Adenoma, Nos

Nasal cavity

Nose Nos

Squamous Cell Carcinoma

Pituitary gland

Angiectasis

Unspecified

Back

Keratoacanthoma

Zymbal gland

Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_504

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Descending, Colon

Adenomatous Polyp, Nos

Ascending Colon, Colon

Signet Ring Carcinoma

Kidney

Mineralization

Thyroid

C-Cell Adenoma

Unspecified

Multiple Organs Nos

Signet Ring Carcinoma, Metastatic

Uterus

Endometrial Stromal Polyp

Endometrium

Papillary Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_505

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Pigmentation, Nos
Focal Cellular Change
Inflammation, Chronic
Metamorphosis, Fatty

Spleen
Stomach

Submucosa

Pigmentation, Nos
Hemosiderosis
Edema, Nos
Inflammation, Acute/Chronic
Ulcer, Acute
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 4_506

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon

Adenocarcinoma, Nos

Kidney

Mineralization

Liver

Hepatitis, Toxic

Lymph node

Mesenteric Lymph Node

Adenocarcinoma, Nos, Metastatic

Unspecified

Pancreatic Lymph Node

Pigmentation, Nos

Adipose Tissue

Inflammation, Chronic

Multiple Organs Nos

Leukemia, Monocytic

Adipose Tissue

Necrosis, Fat

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_507

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver
Lung
Lymph node

Transverse Colon, Colon

Mediastinal Lymph Node
Mesenteric Lymph Node
Ileocolic Lymph Node
Mesenteric Lymph Node

Adenomatous Polyp, Nos
Mineralization
Inflammation, Chronic
Inflammation, Chronic
Hemorrhage
Hemorrhage
Lymphangiectasis
Lymphangiectasis
Hemosiderosis
Hyperplasia, C Cell

Spleen
Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_508

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenomatous Polyp, Nos

Kidney

Mineralization

Liver

Focal Cellular Change

Unspecified

Multiple Organs Nos

Hyperplasia, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_509

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Pituitary gland

Unspecified

Zymbal gland

Multiple Organs Nos

Cortical Adenoma

Cast, Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Hyperplasia, Nos

Adenoma, Nos

Leukemia, Monocytic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_510

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Eye

Cortex Nos

Metamorphosis, Fatty

Kidney

Retina

Cataract

Degeneration, Nos

Mammary gland

Cast, Nos

Mixed Tumor, Malignant

Pituitary gland

Fibroadenoma

Galactocele

Thyroid

Adenoma, Nos

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Polyp

Hydrometra

Zymbal gland

Inflammation, Acute

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_511

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large

Cortex Nos
Descending, Colon
Descending, Colon

Kidney

Metamorphosis, Fatty
Adenomatous Polyp, Nos
Parasitism
Cast, Nos

Liver

Mineralization
Pigmentation, Nos
Focal Cellular Change
Hepatocellular Carcinoma

Pituitary gland
Thyroid

Bile Duct

Hyperplasia, Nos
Adenoma, Nos
Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_512

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-------------------------------------|
| Bone | Sternum | Hyperostosis |
| Ear | | Squamous Cell Carcinoma |
| Intestine Large | Descending, Colon | Adenomatous Polyp, Nos |
| Liver | | Cyst, Nos |
| Lung | | Squamous Cell Carcinoma, Metastatic |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Cervix Uteri | Hyperplasia, Stromal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_513

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|---------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Mammary gland | | Galactocele |
| Spleen | | Thrombus, Fibrin |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_514

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Mixed Tumor, Malignant

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_515

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Mixed Tumor, Malignant

Lymph node

Focal Cellular Change

Mediastinal Lymph Node

Hemorrhage

Mediastinal Lymph Node

Pigmentation, Nos

Ovary

Cyst, Parovarian

Spleen

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_516

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Mucinous Cystadenocarcinoma

Kidney

Mineralization

Ovary

Cyst, Parovarian

Thyroid

C-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Uterus

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

Endometrium

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_517

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Transverse Colon, Colon

Adenomatous Polyp, Nos

Kidney

Mixed Tumor, Malignant

Liver

Focal Cellular Change

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_518

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Liver | | Metamorphosis, Fatty |
| Lung | | Mixed Tumor, Metastatic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Skeletal muscle | Abdominal Muscle | Mixed Tumor, Invasive |
| Stomach | | Acanthosis |
| | | Hyperkeratosis |
| Unspecified | Adipose Tissue | Mixed Tumor, Invasive |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_519

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Thymus

Thyroid

Unspecified

Mediastinal Lymph Node

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Congestion, Nos

Galactocele

Angiectasis

Edema, Nos

C-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_520

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Pheochromocytoma

Cast, Nos

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Neoplastic Nodule

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Angiectasis

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_521

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|---------------------|-----------------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| | | Inflammation, Granulomatous |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_522

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|-----------------------------------|
| Kidney | | Mixed Tumor, Malignant |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Thyroid | | Cystic Follicles |
| Unspecified | Multiple Organs Nos | Signet Ring Carcinoma, Metastatic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_523

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Cecum, Colon

Parasitism

Kidney

Mineralization

Lung

Inflammation, Chronic

Salivary gland

Inflammation, Acute

Thyroid

Hyperplasia, C Cell

Uterus

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_524

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Bone | Sternum | Hyperostosis |
| Intestine Small | Jejunum | Adenomatous Polyp, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| | | Hepatocellular Carcinoma |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Angiectasis |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_525

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Liver

Angiectasis

Mammary gland

Hepatitis, Toxic

Thyroid

Adenoma, Nos

Unspecified

Multiple Organs Nos

C-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_526

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Ascending Colon, Colon

Adenomatous Polyp, Nos
Cast, Nos

Liver

Mineralization

Angiectasis

Degeneration, Cystic

Bile Duct

Hyperplasia, Nos

Inflammation, Chronic

Neoplastic Nodule

Lymph node

Ileocolic Lymph Node

Lymphangiectasis

Mammary gland

Galactocele

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_527

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone marrow

Eye

Intestine Small

Kidney

Liver

Thyroid

Unspecified

Zymbal gland

Mesentery Nos

Adipose Tissue

Multiple Organs Nos

Atrophy, Nos

Cataract

Necrosis, Fat

Cast, Nos

Mineralization

Focal Cellular Change

Hyperplasia, Nos

Pigmentation, Nos

C-Cell Adenoma

Inflammation, Chronic

Leukemia, Monocytic

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_528

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Ascending Colon, Colon

Adenomatous Polyp, Nos

Cecum, Colon

Mucinous Cystadenocarcinoma

Unspecified

Multiple Organs Nos

Mucinous Cystadenocarcinoma, Metastatic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_529

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mineralization

Liver

Mixed Tumor, Malignant

Neoplastic Nodule

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mandibular Lymph Node

Lymphangiectasis

Mammary gland

Fibroadenoma

Ovary

Cyst, Parovarian

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_530

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Hypertrophy, Focal

Cast, Nos

Mineralization

Liver

Focal Cellular Change

Hepatitis, Toxic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Pigmentation, Nos

Skin

Cyst, Nos

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_531

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Colon

Parasitism

Kidney

Mineralization

Liver

Focal Cellular Change

Hepatocellular Carcinoma

Pituitary gland

Angiectasis

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_532

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Kidney

Capsule
Descending, Colon

Inflammation, Chronic
Adenomatous Polyp, Nos
Cytomegaly
Hyperplasia, Tubular Cell
Mineralization

Liver

Mixed Tumor, Malignant
Hemorrhage
Necrosis, Nos

Lung

Lymph node

Mediastinal Lymph Node

Mediastinal Lymph Node

Inflammation, Chronic
Hemorrhage
Pigmentation, Nos

Spleen

Hematopoiesis

Stomach

Submucosa

Edema, Nos
Inflammation, Acute
Ulcer, Acute

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_533

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Angiectasis

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_534

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-------------|------------------------|---------------------|
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Hyperplasia, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_535

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Ascending Colon, Colon

Mucinous Cystadenocarcinoma

Cast, Nos

Mineralization

Liver

Bile Duct

Cyst, Nos

Focal Cellular Change

Hepatitis, Toxic

Hyperplasia, Nos

Lymph node

Mediastinal Lymph Node

Hemorrhage

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_536

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Bone

Skull

Metamorphosis, Fatty

Eye

Hyperostosis

Intestine Large

Descending, Colon

Cataract

Kidney

Adenomatous Polyp, Nos

Liver

Cast, Nos

Inflammation, Chronic

Angiectasis

Focal Cellular Change

Pancreas

Bile Duct

Hyperplasia, Nos

Parathyroid gland

Islets

Islet-Cell Adenoma

Salivary gland

Hyperplasia, Nos

Thyroid

Mineralization

Uterus

Follicular-Cell Adenoma

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_537

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Hemorrhage

Uterus

Cervix Uteri

Hyperplasia, Stromal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_538

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Nos

Intestine Large

Cortex Nos

Metamorphosis, Fatty

Kidney

Descending, Colon

Adenomatous Polyp, Nos

Liver

Mixed Tumor, Malignant

Lung

Capsule

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Mixed Tumor, Metastatic

Pituitary gland

Mediastinal Lymph Node

Mixed Tumor, Metastatic

Stomach

Hemorrhage

Pigmentation, Nos

Angiectasis

Acanthosis

Hyperkeratosis

Inflammation, Chronic

Ulcer, Acute

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_539

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Bone
Kidney

Cortex Nos
Sternum

Metamorphosis, Fatty
Fibrosis, Myelo
Hyperplasia, Tubular Cell
Mineralization
Nephrosis, Nos
Hepatitis, Toxic
Congestion, Nos
Pigmentation, Nos
Islet-Cell Carcinoma
Angiectasis
C-Cell Adenoma
Leukemia, Monocytic

Liver
Lymph node

Mediastinal Lymph Node
Mediastinal Lymph Node

Pancreas
Pituitary gland
Thyroid
Unspecified

Islets

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_540

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Lymph node

Mineralization

Pituitary gland

Mediastinal Lymph Node

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Angiectasis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_541

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Mineralization

Liver
Lymph node
Skin
Spleen
Uterus

Mandibular Lymph Node

Cyst, Nos
Hyperplasia, Plasma Cell
Basal-Cell Carcinoma
Hematopoiesis
Adenoma, Nos

Endometrium

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_542

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Pituitary gland

Spleen

Thyroid

Pigmentation, Nos

Mineralization

Mixed Tumor, Malignant

Focal Cellular Change

Metamorphosis, Fatty

Adenoma, Nos

Hematopoiesis

Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_543

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Pituitary gland

Unspecified

Zymbal gland

Mandibular Lymph Node

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Hyperplasia, Nos

Hyperplasia, Plasma Cell

Angiectasis

Leukemia, Monocytic

Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_544

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Inflammation, Chronic

Liver

Periportal

Angiectasis
Fibrosis

Mammary gland

Focal Cellular Change

Pancreas

Fibroadenoma

Pituitary gland

Inflammation, Chronic

Thyroid

Adenoma, Nos

Unspecified

Cystic Follicles

Uterus

Diaphragm Nos

Hernia, Nos

Endometrium

Cyst, Nos

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_545

TRT#: 4

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | Endometrium | Hyperplasia, Nos |
| | Cervix Uteri | Hyperplasia, Stromal |
| Vagina | | Inflammation, Acute |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_646

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Medulla

Hyperplasia, Focal
Cast, Nos
Inflammation, Chronic
Mineralization
Pigmentation, Nos

Liver
Lung
Lymph node

Mandibular Lymph Node
Mandibular Lymph Node

Hepatitis, Toxic
Inflammation, Chronic
Hyperplasia, Plasma Cell
Inflammation, Chronic

Mammary gland

Fibroadenoma
Galactocele

Pituitary gland
Unspecified

Multiple Organs Nos

Adenoma, Nos
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_647

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Bone

Eye

Kidney

Liver

Lung

Mammary gland

Parathyroid gland

Pituitary gland

Thyroid

Skull

Sternum

Retina

Pheochromocytoma

Hyperostosis

Hyperostosis

Cataract

Degeneration, Nos

Cast, Nos

Inflammation, Chronic

Mineralization

Angiectasis

Focal Cellular Change

Inflammation, Chronic

Fibroadenoma

Hyperplasia, Nos

Adenoma, Nos

C-Cell Carcinoma

Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_648

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------|-----------------------|-----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| Lymph node | Pancreatic Lymph Node | Pigmentation, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_649

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Lymph node

Mammary gland

Spleen

Thyroid

Unspecified

Mandibular Lymph Node

Pancreatic Lymph Node

Cortical Adenoma

Mineralization

Focal Cellular Change

Neoplastic Nodule

Hyperplasia, Plasma Cell

Pigmentation, Nos

Fibroadenoma

Galactocele

Hematopoiesis

Hemosiderosis

Hyperplasia, C Cell

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_650

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland
Kidney
Liver

Lung
Lymph node

Mammary gland
Pituitary gland
Thyroid

Unspecified

Mediastinal Lymph Node
Mandibular Lymph Node

Multiple Organs Nos

Abscess, Nos
Mineralization
Focal Cellular Change
Hepatitis, Toxic
C-Cell Carcinoma, Metastatic
C-Cell Carcinoma, Metastatic
Hyperplasia, Plasma Cell
Fibroadenoma
Hyperplasia, Focal
C-Cell Adenoma
C-Cell Carcinoma
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_651

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Liver
Mammary gland

Mineralization
Focal Cellular Change
Adenocarcinoma, Nos
Fibroadenoma
Atrophy, Nos
Follicular-Cell Adenoma

Pancreas
Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_652

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Clitoral gland

Dilatation, Ducts

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Pigmentation, Nos

Tubular-Cell Adenocarcinoma

Liver

Focal Cellular Change

Lymph node

Pancreatic Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Adenoma, Nos

Dilatation, Ducts

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_653

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|---------------------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Chronic |
| | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Spleen | | Hematopoiesis |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Endometrial Stromal Sarcoma |
| | Cervix Uteri | Endometrial Stromal Sarcoma, Invasive |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_654

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland
Eye

Cortex Nos

Metamorphosis, Fatty
Carcinoma, Nos
Cataract

Kidney
Liver
Lung
Lymph node

Retina

Degeneration, Nos
Cast, Nos
Focal Cellular Change
Papillary Adenocarcinoma, Metastatic

Mammary gland
Pituitary gland
Thyroid
Uterus

Mediastinal Lymph Node
Mediastinal Lymph Node

Hemorrhage
Pigmentation, Nos
Fibroadenoma
Hyperplasia, Focal
C-Cell Adenoma
Papillary Adenocarcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_655

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Mammary gland
Pituitary gland
Spleen
Zymbal gland

Mineralization
Fibroadenoma
Adenoma, Nos
Hemosiderosis
Dilatation, Ducts
Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_656

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|------------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |
| | | Hyperplasia, Follicular Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_657

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Medulla
Myocardium Nos

Hyperplasia, Focal
Fibrosis
Cast, Nos
Inflammation, Chronic

Liver
Lung

Focal Cellular Change
Bronchiectasis
Cyst, Nos

Lymph node
Lymph node
Lymph node

Mediastinal Lymph Node
Mandibular Lymph Node
Mediastinal Lymph Node

Hemorrhage
Hyperplasia, Plasma Cell
Pigmentation, Nos
Atrophy, Nos
Hyperplasia, Nos
Adenoma, Nos

Pancreas
Parathyroid gland
Pituitary gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_658

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Heart
Intestine Large
Kidney
Liver
Lung
Mammary gland

Myocardium Nos
Colon

Fibrosis
Parasitism
Mineralization
Focal Cellular Change
Inflammation, Chronic
Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_659

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------|
| Brain | | Glioma, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Lymphoid |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_660

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Bone

Skull

Hyperostosis

Sternum

Hyperostosis

Heart

Ventricle

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Stomach

Ulcer, Acute

Thyroid

C-Cell Adenoma

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_661

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Lung | | Inflammation, Suppurative |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Nos |
| Parathyroid gland | | Adenoma, Nos |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Acanthosis |
| | | Inflammation, Acute |
| | | Necrosis, Focal |
| Thyroid | | C-Cell Adenoma |
| Urinary bladder | | Transitional-Cell Papilloma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_662

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lymph node

Pituitary gland

Thyroid

Unspecified

Retina

Myocardium Nos

Mediastinal Lymph Node

Multiple Organs Nos

Pheochromocytoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Angiectasis

Focal Cellular Change

Metamorphosis, Fatty

Pigmentation, Nos

Pigmentation, Nos

Adenoma, Nos

C-Cell Carcinoma

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_663

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Hepatitis, Toxic |
| Lymph node | Mediastinal Lymph Node | Pigmentation, Nos |
| Ovary | | Cyst, Parovarian |
| Pituitary gland | | Adenoma, Nos |
| Tongue | | Squamous Cell Papilloma |
| Unspecified | Multiple Organs Nos | Leukemia, Mononuclear Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_664

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Retina

Cataract

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Lymphangiectasis

Pituitary gland

Angiectasis

Thyroid

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_665

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|-----------------------------|
| Brain | | Astrocytoma |
| Kidney | | Cast, Nos |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Perforated |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_666

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------------|-----------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lymph node | Ileocolic Lymph Node | Lymphangiectasis |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| | | Galactocele |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Hyperkeratosis |
| Thyroid | | Hyperplasia, C Cell |
| Zymbal gland | | Dilatation, Ducts |
| | | Hyperkeratosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_667

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Skull | Hyperostosis |
| Brain | | Granular-Cell Tumor, Nos |
| Esophagus | | Hyperkeratosis |
| Eye | | Cataract |
| Heart | Retina | Degeneration, Nos |
| Kidney | Myocardium Nos | Fibrosis |
| | | Cast, Nos |
| | | Mineralization |
| Liver | Bile Duct | Hyperplasia, Nos |
| | | Inflammation, Granulomatous |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Mesenteric Lymph Node | Pigmentation, Nos |
| Mammary gland | | Chondroma |
| | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_668

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos
Inflammation, Chronic
Mineralization

Liver

Inflammation, Granulomatous
Metamorphosis, Fatty

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Mandibular Lymph Node

Lymphangiectasis

Pituitary gland

Adenoma, Nos

Thyroid

Adenoma, Nos

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_669

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-----------------------|
| Brain | | Hemorrhage |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |
| | | Hemosiderosis |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_670

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Brain

Ventricle

Dilatation, Nos

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Adenoma, Nos

Fibroadenoma

Pituitary gland

Galactocele

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_671

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-------------------|-----------------------|-----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Bone | Sternum | Hyperostosis |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Intestine Small | Peyers Patch | Hyperplasia, Lymphoid |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| | | Pneumonia, Aspiration |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| Mammary gland | | Fibroadenoma |
| Parathyroid gland | | Hyperplasia, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_672

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Metamorphosis, Fatty

Lung

Hemorrhage

Inflammation, Suppurative

Lymph node

Mediastinal Lymph Node

Hemorrhage

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Oral mucosa

Palate

Squamous Cell Carcinoma

Thyroid

Follicular-Cell Carcinoma

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_673

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Liver

Lymph node

Mammary gland

Retina

Mandibular Lymph Node

Ileocolic Lymph Node

Mesenteric Lymph Node

Degeneration, Cystic

Cataract

Degeneration, Nos

Cast, Nos

Mineralization

Focal Cellular Change

Inflammation, Granulomatous

Hyperplasia, Plasma Cell

Lymphangiectasis

Pigmentation, Nos

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_674

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Spleen

Ganglioneuroma

Carcinoma, Nos

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_675

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Mineralization

Liver
Lymph node

Mediastinal Lymph Node

Focal Cellular Change

Mammary gland
Pituitary gland
Thyroid

Mediastinal Lymph Node

Hemorrhage

Pigmentation, Nos

Fibroadenoma

Cyst, Nos

C-Cell Adenoma

Follicular-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_676

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Lymph node | Ileocolic Lymph Node | Hemorrhage |
| | Ileocolic Lymph Node | Lymphangiectasis |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Skeletal muscle | | Rhabdomyosarcoma |
| Spleen | | Fibrosis |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |
| | | Inflammation, Acute/Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_677

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Mammary gland

Hepatitis, Toxic

Dilatation, Ducts

Fibroadenoma

Galactocele

Pituitary gland

Cyst, Nos

Thyroid

C-Cell Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Papillary Cystadenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_678

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|-----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Metamorphosis, Fatty |
| Lung | | Inflammation, Interstitial |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Granulosa-Cell Tumor |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Inflammation, Acute/Chronic |
| | | Squamous Cell Papilloma |
| | | Ulcer, Acute |
| Thyroid | | Follicular-Cell Adenoma |
| | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_679

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Kidney

Liver

Lymph node

Mammary gland

Pituitary gland

Spleen

Retina

Hepatic Sinusoid

Mesenteric Lymph Node

Mesenteric Lymph Node

Hematopoiesis

Cataract

Degeneration, Nos

Mineralization

Pigmentation, Nos

Degeneration, Cystic

Focal Cellular Change

Leukocytosis, Nos

Necrosis, Coagulative

Necrosis, Nos

Pigmentation, Nos

Adenoma, Nos

Hypertrophy, Focal

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_680

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Dilatation, Ducts |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | Submucosa | Edema, Nos |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_681

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Cystic

Eye

Metamorphosis, Fatty

Heart

Retina

Cataract

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Fibrosis

Lymph node

Mediastinal Lymph Node

Cast, Nos

Mammary gland

Mediastinal Lymph Node

Mineralization

Ovary

Focal Cellular Change

Pituitary gland

Hemorrhage

Spleen

Pigmentation, Nos

Fibroadenoma

Galactocele

Cyst, Parovarian

Adenoma, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_682

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|--------|--------------|-----------------------------|
| Eye | Retina | Degeneration, Nos |
| Kidney | | Mineralization |
| Spleen | | Hemosiderosis |
| Uterus | Cervix Uteri | Inflammation, Acute/Chronic |
| Vagina | | Inflammation, Acute/Chronic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_683

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Pancreas

Thyroid

Unspecified

Multiple Organs Nos

Mineralization

Hepatitis, Toxic

Necrosis, Coagulative

Atrophy, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_684

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Pituitary gland

Unspecified

Mandibular Lymph Node

Mandibular Lymph Node

Mandibular Lymph Node

Pancreatic Lymph Node

Multiple Organs Nos

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Hemorrhage

Hyperplasia, Plasma Cell

Pigmentation, Nos

Pigmentation, Nos

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_685

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|----------------|-------------------------|------------------------------|
| Clitoral gland | | Carcinoma, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Lung | | Alveolar/Bronchiolar Adenoma |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Cervical Lymph Node Nos | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_686

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Lymph node

Mammary gland

Spleen

Thyroid

Zymbal gland

Mandibular Lymph Node

Mandibular Lymph Node

Mediastinal Lymph Node

Mineralization

Focal Cellular Change

Inflammation, Granulomatous

Inflammation, Chronic

Hyperplasia, Plasma Cell

Lymphangiectasis

Pigmentation, Nos

Dilatation, Ducts

Fibroadenoma

Hemosiderosis

Hyperplasia, C Cell

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_687

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Mammary gland

Mineralization

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_688

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Large
Intestine Small
Kidney

Cortex Nos
Cecum, Colon
Mesentery Nos

Metamorphosis, Fatty
Inflammation, Chronic
Inflammation, Chronic
Cast, Nos

Liver

Inflammation, Chronic
Focal Cellular Change

Lymph node
Parathyroid gland
Spleen
Stomach

Mediastinal Lymph Node

Metamorphosis, Fatty
Pigmentation, Nos
Hyperplasia, Nos
Hemosiderosis
Edema, Nos
Hyperkeratosis
Inflammation, Acute/Chronic
C-Cell Adenoma

Submucosa

Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_689

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|---|---|
| Adrenal gland | | Cortical Adenoma Pheochromocytoma |
| Brain | | Carcinoma, Nos, Invasive |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lung | | Inflammation, Granulomatous |
| Lymph node | Mandibular Lymph Node Ileocolic Lymph Node | Hyperplasia, Plasma Cell Lymphangiectasis |
| Mammary gland | | Galactocele |
| Pituitary gland | | Carcinoma, Nos |
| Stomach | | Acanthosis Hyperkeratosis Inflammation, Acute/Chronic |
| Thyroid | | Ulcer, Acute |
| Unspecified | Multiple Organs Nos | Hyperplasia, C Cell Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_690

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Mineralization

Liver

Pigmentation, Nos

Lymph node

Mandibular Lymph Node

Focal Cellular Change

Mammary gland

Hepatitis, Toxic

Ovary

Hyperplasia, Plasma Cell

Spleen

Fibroadenoma

Thyroid

Cyst, Nos

Unspecified

Multiple Organs Nos

Infarct, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_691

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney

Cecum, Colon

Inflammation, Chronic
Cast, Nos

Liver
Lymph node

Mesenteric Lymph Node
Ileocolic Lymph Node
Mediastinal Lymph Node

Inflammation, Chronic
Hepatitis, Toxic
Hemorrhage
Lymphangiectasis
Pigmentation, Nos

Pituitary gland
Thyroid
Unspecified
Uterus

Multiple Organs Nos

Adenoma, Nos
Hyperplasia, C Cell
Leukemia, Monocytic
Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_692

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Small
Kidney
Liver

Mesentery Nos

Squamous Cell Carcinoma, Invasive
Mineralization
Thrombus, Fibrin
Thrombus, Organized

Lung
Lymph node
Spleen

Mediastinal Lymph Node

Leukocytosis, Neutrophilic
Congestion, Nos
Fibrosis
Hematopoiesis
Hemosiderosis
Infarct, Nos

Stomach
Uterus
Vagina

Cervix Uteri

Squamous Cell Carcinoma
Endometrial Stromal Polyp
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_693

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lung

Metamorphosis, Fatty

Lymph node

Mediastinal Lymph Node

Pneumonia, Aspiration

Mandibular Lymph Node

Hyperplasia, Lymphoid

Mediastinal Lymph Node

Hyperplasia, Plasma Cell

Spleen

Pigmentation, Nos

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_694

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Liver

Mammary gland

Myocardium Nos

Pheochromocytoma

Fibrosis

Focal Cellular Change

Galactocele

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_695

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Liver

Focal Cellular Change

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_696

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Brain

Ventricle

Dilatation, Nos

Heart

Myocardium Nos

Fibrosis

Kidney

Cast, Nos

Inflammation, Chronic

Liver

Pigmentation, Nos

Angiectasis

Mammary gland

Focal Cellular Change

Adenocarcinoma, Nos

Pituitary gland

Galactocele

Adenoma, Nos

Spleen

Hemosiderosis

Stomach

Acanthosis

Inflammation, Acute/Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_697

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mediastinal Lymph Node

Mesenteric Lymph Node

Mediastinal Lymph Node

Pituitary gland

Spleen

Stomach

Mineralization

Focal Cellular Change

Congestion, Nos

Hyperplasia, Lymphoid

Pigmentation, Nos

Angiectasis

Hemosiderosis

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_698

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Cortex Nos

Metamorphosis, Fatty
Cast, Nos
Cyst, Nos

Liver

Bile Duct

Focal Cellular Change
Hyperplasia, Nos
Alveolar/Bronchiolar Adenoma

Lung
Mammary gland

Fibroadenoma

Ovary

Cyst, Parovarian

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Follicular-Cell Carcinoma

Uterus

Leukemia, Monocytic

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_699

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|----------------------------|
| Adrenal gland | Medulla | Hyperplasia, Nos |
| | Cortex Nos | Hypertrophy, Nos |
| | Cortex Nos | Metamorphosis, Fatty |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | Bronchus | Bronchiectasis |
| | Pleura Nos | Fibrosis, Focal |
| | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mandibular Lymph Node | Pigmentation, Nos |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| | Renal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | | Fibroma |
| | Multiple Organs Nos | Leukemia, Mononuclear Cell |
| Zymbal gland | | Squamous Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_700

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|-----------------------------|
| Heart | Myocardium Nos | Inflammation, Chronic |
| Intestine Small | Peyers Patch | Hyperplasia, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_701

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Clitoral gland

Dilatation, Ducts

Liver

Hyperkeratosis

Pituitary gland

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Angiectasis

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_702

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Bone | Skull | Hyperostosis |
| | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Nephrosis, Hydro |
| | | Focal Cellular Change |
| | | Hepatitis, Toxic |
| | Bile Duct | Hyperplasia, Nos |
| Lung | Alveoli | Histiocytosis |
| Mammary gland | | Carcinoma, Nos |
| | | Fibroadenoma |
| Thyroid | | Cystic Follicles |
| | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Urinary bladder | | Hemorrhage |
| | | Hyperplasia, Epithelial |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_703

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Peyers Patch

Hyperplasia, Epithelial

Peyers Patch

Inflammation, Acute/Chronic

Peyers Patch

Ulcer, Acute

Kidney

Cast, Nos

Mineralization

Pigmentation, Nos

Liver

Focal Cellular Change

Necrosis, Coagulative

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Fibroadenoma

Galactocele

Pancreas

Islets

Islet-Cell Adenoma

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_704

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Mammary gland

Pancreas

Spleen

Pancreatic Lymph Node

Islets

Mineralization

Focal Cellular Change

Hyperplasia, Lymphoid

Galactocele

Islet-Cell Adenoma

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_705

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Spleen

Thyroid

Unspecified

Retina

Myocardium Nos

Multiple Organs Nos

Pheochromocytoma, Malignant

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Mineralization

Focal Cellular Change

Pheochromocytoma, Metastatic

Fibroadenoma

Adenoma, Nos

Hemosiderosis

C-Cell Adenoma

Follicular-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_706

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Mammary gland

Ovary

Pituitary gland

Stomach

Thyroid

Uterus

Cortex Nos

Angiectasis

Metamorphosis, Fatty

Cast, Nos

Inflammation, Chronic

Mineralization

Fibroadenoma

Galactocele

Cyst, Parovarian

Adenoma, Nos

Acanthosis

Hyperkeratosis

Hyperplasia, C Cell

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_707

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Lung
Mammary gland
Spleen

Mineralization
Hyperplasia, Alveolar Epithelium
Fibroadenoma
Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_708

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Heart

Kidney

Liver

Lung

Mammary gland

Parathyroid gland

Pituitary gland

Thyroid

Uterus

Retina

Myocardium Nos

Pheochromocytoma

Cataract

Degeneration, Nos

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Focal Cellular Change

Alveolar/Bronchiolar Adenoma

Hyperplasia, Alveolar Epithelium

Fibroadenoma

Galactocele

Hyperplasia, Nos

Adenoma, Nos

C-Cell Carcinoma

Hydrometra

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_709

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Eye

Metamorphosis, Fatty

Kidney

Retina

Cataract

Lung

Degeneration, Nos

Pituitary gland

Cast, Nos

Thyroid

Mineralization

Unspecified

Multiple Organs Nos

Alveolar/Bronchiolar Carcinoma

Adenoma, Nos

C-Cell Adenoma

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_710

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|--------------------------|
| Bone | Skull | Hyperostosis |
| | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | Bile Duct | Hyperplasia, Nos |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Acinar-Cell Adenoma |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Hydrometra |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_711

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Cataract

Retina

Degeneration, Nos

Kidney

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Degeneration, Cystic

Focal Cellular Change

Inflammation, Chronic

Pigmentation, Nos

Lymph node

Mandibular Lymph Node

Hyperplasia, Plasma Cell

Mammary gland

Fibroadenoma

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_712

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_713

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_714

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Blood vessel
Heart
Kidney

Coronary Artery Nos
Myocardium Nos

Mineralization
Fibrosis
Mineralization
Nephrosis, Hydro

Liver

Periportal

Fibrosis
Focal Cellular Change

Lymph node
Mammary gland

Pancreatic Lymph Node

Pigmentation, Nos
Galactocele
Hyperplasia, Nos

Pituitary gland
Spleen

Adenoma, Nos
Hematopoiesis
Hemosiderosis

Thyroid

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_716

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Ovary

Spleen

Thyroid

Unspecified

Capsule

Multiple Organs Nos

Pheochromocytoma

Cast, Nos

Mineralization

Cyst, Nos

Fibrosis

C-Cell Adenoma

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_717

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Brain

Ventricle

Dilatation, Nos

Kidney

Mineralization

Liver

Focal Cellular Change

Inflammation, Acute

Mammary gland

Adenoma, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Follicular-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_718

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|------------------------------|
| Adrenal gland | | Pheochromocytoma, Malignant |
| Blood vessel | Coronary Artery Nos | Mineralization |
| Heart | Myocardium Nos | Fibrosis |
| | Myocardium Nos | Pheochromocytoma, Metastatic |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lung | | Inflammation, Suppurative |
| | | Pheochromocytoma, Metastatic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Pancreas | Islets | Islet-Cell Carcinoma |
| Pituitary gland | | Adenoma, Nos |
| Skin | | Hyperkeratosis |
| Spleen | | Hemosiderosis |
| Thyroid | | Follicular-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_719

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortical Adenoma

Kidney

Pheochromocytoma

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Mineralization

Mammary gland

Fibroadenoma

Pancreas

Islets

Islet-Cell Carcinoma

Pituitary gland

Adenoma, Nos

Thyroid

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_720

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Brain | Ventricle | Dilatation, Nos |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Inflammation, Acute |
| | | Inflammation, Granulomatous |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Acanthosis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_721

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|-----------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Inflammation, Chronic |
| Liver | | Metamorphosis, Fatty |
| Lymph node | Pancreatic Lymph Node | Hyperplasia, Plasma Cell |
| | Pancreatic Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Hyperkeratosis |
| | | Inflammation, Acute/Chronic |
| | | Ulcer, Acute |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_722

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------------|
| Adrenal gland | Cortex Nos | Metamorphosis, Fatty |
| Brain | Ventricle | Dilatation, Nos |
| Intestine Large | Cecum, Colon | Inflammation, Acute/Chronic |
| | Cecum, Colon | Ulcer, Nos |
| Intestine Small | Mesentery Nos | Inflammation, Chronic |
| | Mesentery Nos | Necrosis, Fat |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Hematopoiesis |
| | | Inflammation, Granulomatous |
| | | Metamorphosis, Fatty |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mesenteric Lymph Node | Hyperplasia, Reticulum Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| Pancreas | Islets | Islet-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Stomach | | Acanthosis |
| | | Hyperkeratosis |
| | | Inflammation, Acute/Chronic |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_723

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney
Liver
Lung
Salivary gland

Mineralization
Hernia, Nos
Inflammation, Suppurative
Hyperplasia, Epithelial
Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_724

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|-----------------------|
| Adrenal gland | | Cortical Adenoma |
| Intestine Large | Ascending Colon, Colon | Leiomyoma |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Mineralization |
| Liver | | Focal Cellular Change |
| | | Inflammation, Chronic |
| Lymph node | Mesenteric Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hemosiderosis |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_725

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Pancreas

Spleen

Thyroid

Unspecified

Capsule

Multiple Organs Nos

Hemorrhage

Mineralization

Focal Cellular Change

Hepatitis, Toxic

Atrophy, Nos

Fibrosis

Follicular-Cell Adenoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_726

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Mineralization

Lymph node

Mediastinal Lymph Node

Focal Cellular Change

Mammary gland

Pigmentation, Nos

Adenoma, Nos

Fibroadenoma

Galactocele

Pancreas

Atrophy, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Unspecified

Leg

Fibroma

Neck

Sarcoma, Nos

Zymbal gland

Sarcoma, Nos, Invasive

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_727

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Cortical Adenoma

Heart

Myocardium Nos

Hyperplasia, Focal

Kidney

Fibrosis

Cast, Nos

Inflammation, Chronic

Mineralization

Liver

Metamorphosis, Fatty

Necrosis, Coagulative

Pancreas

Islets

Islet-Cell Adenoma

Pituitary gland

Adenoma, Nos

Thyroid

Follicular-Cell Carcinoma

Uterus

Endometrial Stromal Polyp

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_728

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Lung

Pneumonia, Aspiration

Lymph node

Mediastinal Lymph Node

Hemorrhage

Mediastinal Lymph Node

Hyperplasia, Lymphoid

Mediastinal Lymph Node

Pigmentation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_729

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Spleen

Urinary bladder

Myocardium Nos

Atrium

Mediastinal Lymph Node

Mandibular Lymph Node

Mediastinal Lymph Node

Pheochromocytoma

Fibrosis

Thrombus, Organized

Cast, Nos

Inflammation, Chronic

Focal Cellular Change

Inflammation, Chronic

Hemorrhage

Hyperplasia, Plasma Cell

Pigmentation, Nos

Fibroadenoma

Galactocele

Adenoma, Nos

Hemosiderosis

Transitional-Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_730

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--------------------------|
| Adrenal gland | | Pheochromocytoma |
| Eye | | Cataract |
| | Retina | Degeneration, Nos |
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| | | Pigmentation, Nos |
| Liver | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mandibular Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenoma, Nos |
| | | Fibroadenoma |
| Pituitary gland | | Hypertrophy, Nos |
| Thyroid | | C-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_731

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney

Cortex Nos
Myocardium Nos

Liver
Lung
Mammary gland

Hyperplasia, Focal
Inflammation, Chronic
Cast, Nos
Inflammation, Chronic
Angiectasis
Inflammation, Chronic
Adenoma, Nos
Dilatation, Ducts
Fibroadenoma
Galactocele
Adenoma, Nos
C-Cell Adenoma
C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_732

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-------------------|----------------|-----------------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Cast, Nos |
| | | Inflammation, Chronic |
| Liver | | Focal Cellular Change |
| | | Inflammation, Granulomatous |
| | | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| | | Galactocele |
| Ovary | | Granulosa-Cell Tumor |
| Parathyroid gland | | Hyperplasia, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_733

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|---------------------------|
| Kidney | | Mineralization |
| Liver | Periportal | Fibrosis |
| | | Focal Cellular Change |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Spleen | | Hematopoiesis |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A
Test Type: Long-Term
Route: Dosed-Feed
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Asbestos, chrysotile(IR)
CAS Number: 12001-29-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:01:16
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 5_734

TRT#: 5
DOSE: 10000 PPM

SEX: Female
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------------|--|
| Adrenal gland | Medulla | Hyperplasia, Focal |
| Kidney | | Cast, Nos Inflammation, Chronic Mineralization |
| Liver | | Metamorphosis, Fatty |
| Lung | | Inflammation, Chronic |
| Lymph node | Mediastinal Lymph Node | Hemorrhage |
| Mammary gland | Mediastinal Lymph Node | Pigmentation, Nos Adenoma, Nos Fibroadenoma Galactocele |
| Ovary | | Cyst, Nos |
| Pancreas | | Acinar-Cell Adenoma |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Inflammation, Acute/Chronic Ulcer, Chronic |
| Thyroid | | C-Cell Carcinoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_735

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------------|----------------------------|
| Bone | Sternum | Hyperostosis |
| Kidney | | Cast, Nos |
| | | Mineralization |
| Liver | | Leukocytosis, Neutrophilic |
| | | Necrosis, Coagulative |
| Lymph node | Mediastinal Lymph Node | Congestion, Nos |
| | Mediastinal Lymph Node | Hyperplasia, Plasma Cell |
| | Mediastinal Lymph Node | Pigmentation, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| Spleen | | Hematopoiesis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_736

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Hepatitis, Toxic

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Angiectasis

Thyroid

Cyst, Nos

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_737

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Cast, Nos

Liver

Hepatitis, Toxic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_738

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Congestion, Nos

Eye

Cortex Nos

Degeneration, Cystic

Liver

Mammary gland

Retina

Metamorphosis, Fatty

Cataract

Degeneration, Nos

Focal Cellular Change

Adenocarcinoma, Nos

Fibroadenoma

Galactocele

Pituitary gland

Angiectasis

Hypertrophy, Focal

Salivary gland

Sarcoma, Nos

Spleen

Hematopoiesis

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_739

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Bone
Heart
Kidney

Skull
Myocardium Nos

Pheochromocytoma
Hyperostosis
Fibrosis
Cast, Nos
Cyst, Nos
Inflammation, Chronic
Mineralization
Angiectasis
Focal Cellular Change
Metamorphosis, Fatty
Hemorrhage
Hyperplasia, Plasma Cell
Fibroadenoma
Hyperplasia, Nos
Adenoma, Nos
Hematopoiesis
Acanthosis
Inflammation, Acute/Chronic
Ulcer, Chronic
C-Cell Adenoma

Liver

Lymph node

Mediastinal Lymph Node
Mandibular Lymph Node

Mammary gland
Parathyroid gland
Pituitary gland
Spleen
Stomach

Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_740

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Kidney

Mineralization

Liver

Hepatitis, Toxic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_741

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Metamorphosis, Fatty
Mineralization
Inflammation, Chronic

Lymph node
Mammary gland
Salivary gland
Spleen

Mandibular Lymph Node

Metamorphosis, Fatty
Hyperplasia, Plasma Cell
Fibroadenoma
Inflammation, Chronic
Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_742

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|------------|------------------------|-----------------------|
| Heart | Myocardium Nos | Fibrosis |
| Kidney | | Mineralization |
| Lung | | Abscess, Nos |
| | | Inflammation, Chronic |
| Lymph node | Mandibular Lymph Node | Congestion, Nos |
| | Mediastinal Lymph Node | Congestion, Nos |
| Spleen | | Hemosiderosis |
| Thymus | | Congestion, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_743

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland
Esophagus
Eye

Retina

Kidney
Liver
Lung

Lymph node
Pituitary gland
Spleen
Thyroid
Uterus

Mediastinal Lymph Node

Carcinoma, Nos
Hyperkeratosis
Cataract
Degeneration, Nos
Cast, Nos
Focal Cellular Change
Inflammation, Chronic
Pigmentation, Nos
Angiectasis
Hematopoiesis
C-Cell Adenoma
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_744

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Pituitary gland

Thyroid

Angiectasis

Mineralization

Focal Cellular Change

Fibroadenoma

Galactocele

Angiectasis

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C61234A

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Asbestos, chrysotile(IR)

CAS Number: 12001-29-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:01:16

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_745

TRT#: 5

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Thyroid

Mineralization

Focal Cellular Change

Fibroadenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE