

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

C Number: C54717

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Female

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_001

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Pigmentation, Nos

Mammary gland

Cystic Disease

Ovary

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_002

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Leukocytosis, Nos

Mammary gland

Cystic Disease

Ovary

Cyst, Follicular Nos

Pituitary gland

Adenoma, Nos

Thymus

Thymoma, Benign

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_003

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Pheochromocytoma

Liver

Bile Duct

Hyperplasia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_004

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Preputial gland

Uterus

Bile Duct

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

Carcinoma, Nos

Inflammation, Suppurative

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_005

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|----------------|-------------------------|
| Brain | Cerebellum Nos | Medulloblastoma |
| Liver | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Stomach | Forestomach | Squamous Cell Papilloma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_006

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Cirrhosis, Nos

Bile Duct

Hyperplasia, Nos

Mammary gland

Regeneration, Nodular

Cystic Disease

Pituitary gland

Fibroadenoma

Unspecified

Multiple Organs Nos

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_007

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Liver
Mammary gland
Thyroid

Bile Duct

Hyperplasia, Nos
Fibroadenoma
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_008

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|---------------------------|
| Liver | | Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Focal Cellular Change |
| Thyroid | | C-Cell Adenoma |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_009

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Bone marrow

Liver

Bile Duct

Peritoneum

Spleen

Unspecified

Uterus

Multiple Organs Nos

Vagina

Fibrosis, Myelo

Cirrhosis, Nos

Hyperplasia, Nos

Regeneration, Nodular

Inflammation, Suppurative

Hematopoiesis

Endometrial Stromal Sarcoma, Metastatic

Endometrial Stromal Sarcoma

Inflammation, Suppurative

Endometrial Stromal Sarcoma, Invasive

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_010

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Tongue

Bile Duct

Pheochromocytoma

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_011

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Liver
Mammary gland
Pituitary gland
Unspecified

Centrilobular

Multiple Organs Nos

Atrophy, Nos
Cystic Disease
Angiectasis
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_012

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|----------------------------------|
| Brain | | Hemorrhage |
| Liver | Centrilobular | Atrophy, Nos |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Hyperplasia, Alveolar Epithelium |
| Mammary gland | | Cystic Disease |
| Ovary | | Metamorphosis, Fatty |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_013

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------|---|
| Liver | | Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos |
| Lung | Alveoli | Histiocytosis |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Adenoma, Nos |
| Skin | Chest | Basal-Cell Tumor |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_014

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Liver

Mammary gland

Ovary

Pancreas

Unspecified

Uterus

Mesentery Nos

Bile Duct

Multiple Organs Nos

Endometrium

Necrosis, Fat

Hyperplasia, Nos

Cystic Disease

Cyst, Follicular Nos

Atrophy, Focal

Leukemia, Monocytic

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_015

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------|---------------------------|
| Liver | | Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos |
| Lung | Alveoli | Histiocytosis |
| | | Hyperplasia, Lymphoid |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Ovary | | Cyst, Follicular Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Degeneration, Cystic |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_016

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small
Liver

Mesentery Nos

Necrosis, Fat
Cytoplasmic Change, Basophilic
Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Mammary gland
Parathyroid gland
Uterus

Cystic Disease

Hyperplasia, Focal

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_017

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_018

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Lymph node
Mammary gland

Medulla
Harderian Gland
Mandibular Lymph Node

Hyperplasia, Focal
Ectopia
Inflammation, Nos
Cystic Disease
Fibroadenoma
Adenoma, Nos

Pituitary gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_019

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Liver

Cortex Nos

Cytoplasmic Vacuolization
Cirrhosis, Nos
Cytoplasmic Change, Basophilic
Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos
Regeneration, Nodular

Mammary gland
Ovary
Pituitary gland
Spleen
Uterus

Cystic Disease
Cyst, Follicular Nos
Angiectasis
Hematopoiesis
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_020

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Bile Duct

Dilatation, Nos

Bile Duct

Hyperplasia, Nos

Regeneration, Nodular

Mammary gland

Cystic Disease

Pituitary gland

Angiectasis

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_021

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Liver

Cortex Nos

Cytoplasmic Vacuolization

Uterus

Bile Duct

Hyperplasia, Nos

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_022

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney

Nephrosis, Nos

Liver

Cirrhosis, Nos

Bile Duct

Hyperplasia, Nos

Lung

Necrosis, Focal

Congestion, Nos

Mammary gland

Edema, Nos

Cystic Disease

Pituitary gland

Adenoma, Nos

Zymbal gland

Adenosquamous Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_023

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Bone marrow

Fibrosis, Myelo

Liver

Centrilobular

Metamorphosis, Fatty

Centrilobular

Necrosis, Nos

Unspecified

Multiple Organs Nos

Regeneration, Nodular

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_024

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Pituitary gland

Unspecified

Bile Duct

Sole Of Foot

Pheochromocytoma

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

Adenoma, Nos

Callus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_025

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------|-----------------------|
| Liver | Centrilobular | Congestion, Nos |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Pneumonia, Aspiration |
| Mammary gland | | Cystic Disease |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_026

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Bile Duct

Hyperplasia, Nos

Mammary gland

Regeneration, Nodular

Spleen

Cystic Disease

Unspecified

Fibroadenoma

Multiple Organs Nos

Fibrosis, Focal

Lower Leg Nos

Leukemia, Monocytic

Osteosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_027

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Bile Duct

Pheochromocytoma

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_028

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Thyroid | | Cystic Follicles |
| | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_029

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------|-------------|---|
| Liver | | Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos Pigmentation, Nos C-Cell Adenoma |
| Thyroid | | Cyst, Nos |
| Uterus | Endometrium | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_030

TRT#: 1

DOSE: 062.0 MG/KG

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|-----------------|----------------------|
| Brain | Hydrocephalus, Nos |
| Kidney | Nephrosis, Nos |
| Liver | Metamorphosis, Fatty |
| Mammary gland | Cystic Disease |
| Ovary | Cyst, Follicular Nos |
| Pituitary gland | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_031

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|----------------------------------|
| Adrenal gland | Cortex Nos | Cytoplasmic Vacuolization |
| Brain | Hypothalamus Nos | Atrophy, Pressure |
| Harderian gland | Hardarian Gland | Ectopia |
| Kidney | | Nephrosis, Nos |
| Liver | | Fibrosis, Cholangio |
| | Bile Duct | Hyperplasia, Nos |
| Lung | Alveoli | Histiocytosis |
| | | Hyperplasia, Alveolar Epithelium |
| Mammary gland | | Cystic Disease |
| | | Hyperplasia, Cystic |
| Pituitary gland | | Adenoma, Nos |
| Preputial gland | | Adenoma, Nos |
| | | Inflammation, Suppurative |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_032

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Stomach

Thyroid

Unspecified

Bile Duct

Omentum Nos

Sole Of Foot

Pheochromocytoma

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

Necrosis, Fat

C-Cell Adenoma

Callus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_033

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|------------------|---------------------------|
| Liver | | Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Pancreas | | Cystic Ducts |
| Skin | Foot And Toe Nos | Hyperplasia, Polypoid |
| Unspecified | Sole Of Foot | Callus |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_034

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|---------------------------|
| Heart | Myocardium Nos | Fibrosis, Focal |
| Liver | Centrilobular | Atrophy, Nos |
| | Bile Duct | Hyperplasia, Nos |
| | | Regeneration, Nodular |
| Mammary gland | | Cystic Disease |
| Pancreas | | Atrophy, Focal |
| Pituitary gland | | Angiectasis |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_035

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain

Astrocytoma

Liver

Centrilobular

Congestion, Nos

Fibrosis, Cholangio

Lung

Bile Duct

Hyperplasia, Nos

Congestion, Nos

Pancreas

Acinus

Edema, Nos

Atrophy, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_036

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-----------|---|
| Liver | | Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Ovary | | Cyst, Follicular Nos |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_037

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Liver

Congestion, Nos

Bile Duct

Hyperplasia, Nos

Lung

Congestion, Nos

Edema, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_038

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Fibrosis, Cholangio

Bile Duct

Hyperplasia, Nos

Metamorphosis, Fatty

Lung

Necrosis, Focal

Mammary gland

Congestion, Nos

Pituitary gland

Cystic Disease

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_039

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------|---------------------------|
| Adrenal gland | Cortex Nos | Cytoplasmic Vacuolization |
| | Medulla | Hyperplasia, Focal |
| Intestine Small | Mesentery Nos | Fibrosarcoma |
| | Mesentery Nos | Granulation Tissue |
| | Ileum | Inflammation, Nos |
| | Mesentery Nos | Steatitis |
| Kidney | | Nephrosis, Nos |
| Liver | | Fibrosis, Cholangio |
| | Bile Duct | Hyperplasia, Nos |
| | Centrilobular | Metamorphosis, Fatty |
| Lung | | Congestion, Nos |
| Spleen | | Hematopoiesis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_041

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Retinopathy

Mammary gland

Cytoplasmic Vacuolization

Pituitary gland

Cystic Disease

Fibroadenoma

Stomach

Omentum Nos

Angiectasis

Hyperplasia, Focal

Uterus

Necrosis, Fat

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_042

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Intestine Small

Mesentery Nos

Retinopathy

Liver

Necrosis, Fat

Cytoplasmic Change, Basophilic

Bile Duct

Deformity, Nos

Mammary gland

Hyperplasia, Nos

Cystic Disease

Thyroid

Fibroadenoma

C-Cell Adenoma

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_043

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Liver

Myocardium Nos

Bile Duct

Unspecified

Multiple Organs Nos

Cytoplasmic Vacuolization

Fibrosis, Focal

Cirrhosis, Nos

Hyperplasia, Nos

Regeneration, Nodular

Leukemia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_044

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Pancreas

Atrophy, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_045

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver
Pituitary gland
Thyroid
Uterus

Bile Duct

Hyperplasia, Nos
Angiectasis
C-Cell Carcinoma
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_046

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Small

Jejunum

Mucinous Adenocarcinoma

Liver

Bile Duct

Cirrhosis, Nos

Hyperplasia, Nos

Necrosis, Focal

Lung

Congestion, Nos

Edema, Nos

Lymph node

Mesenteric Lymph Node

Hyperplasia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_047

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Pituitary gland

Bile Duct

Pheochromocytoma

Nephrosis, Nos

Cytoplasmic Vacuolization

Hyperplasia, Nos

Cystic Disease

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_048

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|----------------------|
| Liver | | Cirrhosis, Nos |
| | Bile Duct | Hyperplasia, Nos |
| | | Metamorphosis, Fatty |
| Lung | | Congestion, Nos |
| Mammary gland | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Spleen | | Hematopoiesis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_049

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Ovary | | Cyst, Follicular Nos |
| Pituitary gland | | Adenoma, Nos |
| Skin | Back | Keratoacanthoma |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_050

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 062.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Lymphoma, Histiocytic-Malignant Type

Liver

Cirrhosis, Nos

Bile Duct

Hyperplasia, Nos

Lung

Necrosis, Focal

Spleen

Leukocytosis, Nos

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_001

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Retinopathy

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Ovary

Cyst, Nos

Pituitary gland

Angiectasis

Hyperplasia, Nos

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_002

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Liver

Mammary gland

Ovary

Bile Duct

Pheochromocytoma

Cataract

Retinopathy

Hyperplasia, Nos

Fibroadenoma

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_003

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Intestine Small

Liver

Mammary gland

Mesentery Nos

Bile Duct

Pheochromocytoma

Cataract

Retinopathy

Necrosis, Fat

Hyperplasia, Nos

Neoplastic Nodule

Cystic Disease

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_004

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

| | |
|-----------------|---|
| Liver | Congestion, Nos Cytoplasmic Change, Basophilic |
| Lung | Congestion, Nos Edema, Nos |
| Mammary gland | Cystic Disease |
| Pituitary gland | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_005

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Retinopathy

Mammary gland

Pancreas

Thyroid

Bile Duct

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Atrophy, Focal

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_006

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye

Medulla

Cytologic Alteration, Nos
Cataract

Heart
Liver
Mammary gland

Myocardium Nos
Bile Duct

Retinopathy
Fibrosis, Focal
Hyperplasia, Nos
Cystic Disease
Fibroadenoma

Pituitary gland
Thyroid
Unspecified
Uterus

Multiple Organs Nos

Adenoma, Nos
Hyperplasia, C Cell
Leukemia, Monocytic
Adenomyosis
Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_007

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Retinopathy

Mammary gland

Bile Duct

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_008

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------------|
| Brain | Thalamus | Atrophy, Pressure |
| Eye | | Cataract |
| | | Retinopathy |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Adenoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_009

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Mammary gland

Retinopathy

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_010

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Hematopoiesis
Nephrosis, Nos
Leukocytosis, Nos
Necrosis, Focal
Regeneration, Nodular

Lung
Lymph node

Mediastinal Lymph Node
Mediastinal Lymph Node

Leukocytosis, Nos
Angiectasis

Mammary gland
Pituitary gland

Hemosiderosis
Cystic Disease

Spleen

Angiectasis

Unspecified

Multiple Organs Nos

Hematopoiesis

Uterus

Sarcoma, Nos

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_011

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|---------------------|
| Ear | | Inflammation, Acute |
| Eye | | Cataract |
| | | Retinopathy |
| Mammary gland | | Cystic Disease |
| Spleen | | Hematopoiesis |
| Stomach | Fundal Gland | Dilatation, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Multiple Organs Nos | Osteosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_012

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Retinopathy

Mammary gland

Bile Duct

Cytoplasmic Change, Basophilic

Pancreas

Hyperplasia, Nos

Thyroid

Cystic Disease

Uterus

Atrophy, Focal

Vagina

C-Cell Adenoma

Inflammation, Suppurative

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_013

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Liver

Bile Duct

Retinopathy

Mammary gland

Hyperplasia, Nos

Pituitary gland

Cystic Disease

Vagina

Hyperplasia, Focal

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_014

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|--------------------------------|
| Eye | | Cataract |
| | | Retinopathy |
| Kidney | | Nephrosis, Nos |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Ovary | | Cyst, Follicular Nos |
| Pancreas | | Atrophy, Focal |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_015

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Brain

Thalamus

Atrophy, Pressure

Eye

Cataract

Retinopathy

Kidney

Nephrosis, Nos

Liver

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Regeneration, Nodular

Mammary gland

Cystic Disease

Fibroadenoma

Pancreas

Atrophy, Focal

Pituitary gland

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_016

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Liver

Lung

Mammary gland

Bile Duct

Alveolar Epithelium

Preputial gland

Unspecified

Multiple Organs Nos

Retinopathy

Hyperplasia, Nos

Hyperplasia, Adenomatous

Cystic Disease

Fibroadenoma

Hyperplasia, Cystic

Hyperplasia, Cystic

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_017

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------|--------------------------------|
| Eye | | Cataract |
| | | Retinopathy |
| Intestine Small | Mesentery Nos | Necrosis, Fat |
| Kidney | | Nephrosis, Nos |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Adenoma, Nos |
| Uterus | Endometrium | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_018

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|---------------------|-------------------------|
| Eye | | Cataract |
| | | Retinopathy |
| Intestine Large | Rectum | Fibrosarcoma |
| Kidney | | Nephrosis, Nos |
| Liver | Bile Duct | Hyperplasia, Nos |
| | | Regeneration, Nodular |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Hyperplasia, Focal |
| Thyroid | | Follicular-Cell Adenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_019

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|---------------------|
| Eye | | Cataract |
| | | Retinopathy |
| Heart | Myocardium Nos | Inflammation, Focal |
| Liver | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Stomach | Omentum Nos | Necrosis, Fat |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_020

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Liver

Pituitary gland

Unspecified

Uterus

Bile Duct

Sole Of Foot

Sole Of Foot

Endometrium

Pheochromocytoma

Cataract

Retinopathy

Focal Cellular Change

Hyperplasia, Nos

Adenoma, Nos

Callus

Erosion

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_021

TRT#: 2

DOSE: 031.0 MG/KG

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|---------------|---------------------------|
| Lung | Edema, Nos |
| Mammary gland | Cystic Disease |
| Spleen | Hematopoiesis |
| Uterus | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_022

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Bile Duct

Mammary gland

Pituitary gland

Unspecified

Sole Of Foot

Pheochromocytoma

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Pigmentation, Nos

Cystic Disease

Hyperplasia, Focal

Ulcer, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_023

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------|----------------------|
| Brain | Hypothalamus Nos | Atrophy, Pressure |
| Kidney | | Nephrosis, Nos |
| Liver | | Metamorphosis, Fatty |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |
| Unspecified | Perineum | Lipoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_024

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|--------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Pancreas | | Atrophy, Focal |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | C-Cell Carcinoma |
| Unspecified | Sole Of Foot | Callus |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_025

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye

Cortex Nos

Cytoplasmic Vacuolization
Cataract

Heart
Liver

Myocardium Nos

Retinopathy
Fibrosis, Focal
Cytoplasmic Change, Basophilic
Leukocytosis, Nos

Mammary gland

Cystic Disease
Fibroadenoma

Pancreas
Parathyroid gland
Pituitary gland
Preputial gland
Unspecified

Atrophy, Focal
Adenoma, Nos
Adenoma, Nos
Adenosquamous Carcinoma
Callus

Sole Of Foot

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_026

TRT#: 2

DOSE: 031.0 MG/KG

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Pancreas

Pituitary gland

Pheochromocytoma

Leukocytosis, Nos

Adenocarcinoma, Nos

Cystic Disease

Atrophy, Focal

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_027

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver

Cortex Nos

Cytoplasmic Vacuolization
Nephrosis, Nos
Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos
Necrosis, Focal

Mammary gland
Pituitary gland
Skin
Spleen

Cheek

Cystic Disease
Adenoma, Nos
Ulcer, Chronic
Hematopoiesis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_028

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Pituitary gland

Thyroid

Uterus

Bile Duct

Nephrosis, Nos

Hyperplasia, Nos

Cystic Disease

Adenoma, Nos

C-Cell Adenoma

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_029

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Eye

Cortex Nos

Accessory Structure
Cataract

Liver
Mammary gland
Zymbal gland

Bile Duct

Retinopathy
Hyperplasia, Nos
Cystic Disease
Hyperplasia, Nos
Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_030

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Pheochromocytoma

Mammary gland

Bile Duct

Cytoplasmic Change, Basophilic

Pituitary gland

Hyperplasia, Nos

Stomach

Omentum Nos

Cystic Disease

Thyroid

Fibroadenoma

Uterus

Endometrium

Acidophil Adenoma

Necrosis, Fat

C-Cell Adenoma

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_031

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver
Mammary gland
Pancreas
Uterus

Bile Duct

Fallopian Tube
Fallopian Tube

Hyperplasia, Nos
Cystic Disease
Atrophy, Focal
Dilatation, Nos
Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_032

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Liver

Mammary gland

Pancreas

Pituitary gland

Salivary gland

Thyroid

Unspecified

Uterus

Myocardium Nos

Neck

Sole Of Foot

Endometrium

Pheochromocytoma

Fibrosis, Focal

Cytoplasmic Change, Basophilic

Cystic Disease

Atrophy, Focal

Angiectasis

Fibrosis

Hyperplasia, C Cell

Abscess, Nos

Callus

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_033

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Ovary

Pituitary gland

Uterus

Bile Duct

Endometrium

Nephrosis, Nos

Hyperplasia, Nos

Cyst, Nos

Angiectasis

Hyperplasia, Focal

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_034

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Necrosis, Fat

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Unspecified

Groin

Fibroadenoma

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_035

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Pancreas

Atrophy, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_036

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Lung

Pneumonia, Aspiration

Ovary

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_037

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|--------------------------------|
| Heart | Myocardium Nos | Fibrosis, Focal |
| Intestine Small | Mesentery Nos | Necrosis, Fat |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pancreas | | Atrophy, Focal |
| Preputial gland | | Carcinoma, Nos |
| | | Inflammation, Suppurative |
| Unspecified | | Fibroma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_038

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | |
|-----------------|--------------------------------|
| Liver | Cytoplasmic Change, Basophilic |
| Mammary gland | Cystic Disease |
| | Fibroadenoma |
| Pituitary gland | Adenoma, Nos |
| Uterus | Inflammation, Suppurative |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_039

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|---------------------------|
| Liver | Bile Duct | Hyperplasia, Nos |
| | Centrilobular | Metamorphosis, Fatty |
| Mammary gland | | Cystic Disease |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_040

TRT#: 2

DOSE: 031.0 MG/KG

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

| | |
|---------------|--------------------------------|
| Liver | Cytoplasmic Change, Basophilic |
| Mammary gland | Cystic Disease |
| | Fibroadenoma |
| Pancreas | Atrophy, Focal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_041

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------------|-------------------------|
| Kidney | | Nephrosis, Nos |
| Liver | Bile Duct | Hyperplasia, Nos |
| | | Metamorphosis, Fatty |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Adenoma, Nos |
| Preputial gland | | Hyperplasia, Cystic |
| Stomach | | Hyperplasia, Epithelial |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | Endometrial Gland | Cyst, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_042

TRT#: 2

DOSE: 031.0 MG/KG

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

Kidney

Liver

Mammary gland

Pituitary gland

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Cystic Disease

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_043

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Kidney

Liver

Mammary gland

Pancreas

Pituitary gland

Thyroid

Thalamus

Bile Duct

Islets

Pheochromocytoma

Atrophy, Pressure

Nephrosis, Nos

Hyperplasia, Nos

Cystic Disease

Islet-Cell Adenoma

Adenoma, Nos

C-Cell Adenoma

Cyst, Ultimobranchial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_044

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Mammary gland

Tubule

Pigmentation, Nos

Cystic Disease

Fibroadenoma

Unspecified

Back

Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_045

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver
Mammary gland

Bile Duct

Hyperplasia, Nos
Cystic Disease
Fibroadenoma
Hyperplasia, Focal
Endometrial Stromal Polyp

Pituitary gland
Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_046

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Preputial gland | | Adenoma, Nos |
| | | Inflammation, Suppurative |
| Spleen | | Hematopoiesis |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_047

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney
Liver
Mammary gland

Bile Duct

Nephrosis, Nos
Hyperplasia, Nos
Cystic Disease
Fibroadenoma
Sarcoma, Nos
Sarcoma, Nos, Metastatic
Endometrial Stromal Polyp
Hematometra

Unspecified
Uterus

Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_048

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Lung

Alveolar/Bronchiolar Carcinoma

Mammary gland

Cystic Disease

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_049

TRT#: 2

DOSE: 031.0 MG/KG

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Liver

Mammary gland

Thyroid

Cortical Adenoma

Retinopathy

Bile Duct Adenoma

Cytoplasmic Change, Basophilic

Cystic Disease

Fibroadenoma

C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_050

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 031.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|---------------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Unspecified | Multiple Organs Nos | Leukemia, Monocytic |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_001

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|---|
| Liver | Bile Duct | Hyperplasia, Nos Regeneration, Nodular |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_002

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Pancreas

Pituitary gland

Unspecified

Bile Duct

Multiple Organs Nos

Pheochromocytoma

Nephrosis, Nos

Hyperplasia, Nos

Cystic Disease

Atrophy, Focal

Adenoma, Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_003

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Nephrosis, Nos

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Unspecified

Abdomen

Basal-Cell Tumor

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_004

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Deformity, Nos

Lung

Bile Duct

Hyperplasia, Nos

Pleura Nos

Abscess, Nos

Pleura Nos

Granuloma, Lipo

Mammary gland

Cystic Disease

Ovary

Fibroadenoma

Unspecified

Mediastinum Nos

Cyst, Follicular Nos

Granuloma, Lipo

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_005

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain

Hypothalamus Nos

Atrophy, Pressure

Liver

Bile Duct

Hyperplasia, Nos

Mammary gland

Hyperplasia, Cystic

Pituitary gland

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_006

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye

Cataract

Kidney

Retinopathy

Liver

Nephrosis, Nos

Cytoplasmic Vacuolization

Bile Duct

Deformity, Nos

Hyperplasia, Nos

Mammary gland

Cystic Disease

Stomach

Hyperplasia, Epithelial

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_007

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------------|
| Bone | Femur | Enostosis |
| Liver | | Cytoplasmic Change, Basophilic |
| | | Cytoplasmic Vacuolization |
| | | Deformity, Nos |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Ovary | | Cyst, Follicular Nos |
| Pituitary gland | | Adenoma, Nos |
| Uterus | | Leiomyosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_008

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Liver

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Ovary

Cyst, Follicular Nos

Unspecified

Sole Of Foot

Callus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_009

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|--------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Cystic Disease |
| Thyroid | | Cyst, Ultimobranchial |
| Unspecified | Sole Of Foot | Callus |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_010

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Thyroid

Bile Duct

Pheochromocytoma

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Fibroadenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_011

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Focal

Mammary gland

Cystic Disease

Pituitary gland

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_012

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver
Mammary gland
Stomach
Thyroid

Bile Duct

Omentum Nos

Hyperplasia, Focal
Cystic Disease
Necrosis, Fat
C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_013

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Mammary gland
Stomach

Tubule
Omentum Nos

Pigmentation, Nos
Fibroadenoma
Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_014

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Heart

Myocardium Nos

Inflammation, Focal

Liver

Hematopoiesis

Lung

Leukocytosis, Nos

Mammary gland

Cystic Disease

Spleen

Hematopoiesis

Thyroid

Hyperplasia, C Cell

Urinary bladder

Transitional-Cell Papilloma

Uterus

Endometrial Stromal Polyp

Endometrial Stromal Sarcoma

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_015

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Intestine Small

Liver

Lymph node

Mammary gland

Mesentery Nos

Mandibular Lymph Node

Necrosis, Fat

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_016

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Ovary | | Cyst, Follicular Nos |
| Pancreas | | Atrophy, Focal |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_017

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Pancreas

Atrophy, Focal

Thyroid

C-Cell Adenoma

Unspecified

Sole Of Foot

Callus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_018

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Accessory Structure

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Focal

Mammary gland

Cystic Disease

Pancreas

Atrophy, Focal

Pituitary gland

Hyperplasia, Focal

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_019

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Eye

Hemorrhage

Liver

Retinopathy

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Pituitary gland

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_020

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------|---|
| Liver | | Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization |
| | Bile Duct | Hyperplasia, Nos Cystic Disease |
| Mammary gland | | Angiectasis |
| Pituitary gland | | Inflammation, Suppurative |
| Preputial gland | | Cyst, Nos |
| Uterus | Endometrium | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_021

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Liver

Deformity, Nos

Lung

Leukocytosis, Nos

Spleen

Leukocytosis, Nos

Uterus

Hematopoiesis

Endometrium

Endometrial Stromal Sarcoma

Hyperplasia, Cystic

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_022

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Deformity, Nos

Pancreas

Atrophy, Focal

Pituitary gland

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_023

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|------------------|----------------------------|
| Eye | | Retinopathy |
| Intestine Large | Submucosa, Colon | Inflammation, Nos |
| Kidney | Tubule | Cytoplasmic Vacuolization |
| | Tubule | Pigmentation, Nos |
| Liver | Bile Duct | Hyperplasia, Nos |
| Lung | | Chondrosarcoma, Metastatic |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Unspecified | Pelvis Nos | Chondrosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_024

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Unspecified

Sole Of Foot

Callus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_025

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------|
| Eye | | Retinopathy |
| Liver | Bile Duct | Hyperplasia, Nos |
| Lung | Alveoli | Hyperplasia, Adenomatous |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Hyperplasia, Focal |
| Thyroid | | Hyperplasia, C Cell |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_026

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Intestine Small
Liver

Medulla
Mesentery Nos

Hyperplasia, Focal
Necrosis, Fat
Cytoplasmic Change, Basophilic

Mammary gland
Ovary
Pituitary gland

Bile Duct

Hyperplasia, Nos
Cystic Disease
Cyst, Nos
Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_027

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------------------|
| Liver | Bile Duct | Hyperplasia, Nos |
| Lymph node | Mesenteric Lymph Node | Lymphoma, Histiocytic-Malignant Type |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Hyperplasia, Focal |
| Thyroid | | Cystic Follicles |
| Unspecified | Sole Of Foot | Callus |
| Uterus | | Endometrial Stromal Polyp |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_028

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Liver

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Fibroadenoma

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_029

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| Lymph node | Mandibular Lymph Node | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Ovary | | Cyst, Nos |
| Pituitary gland | | Adenoma, Nos |
| Thyroid | | Hyperplasia, C Cell |
| Unspecified | Sole Of Foot | Callus |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_030

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Necrosis, Fat

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Fibroadenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_031

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Mammary gland
Pituitary gland
Thyroid
Unspecified
Uterus

Cortex Nos

Multiple Organs Nos

Degeneration, Cystic
Cystic Disease
Adenoma, Nos
C-Cell Carcinoma
Leukemia, Monocytic
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_032

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Pituitary gland

Bile Duct

Pheochromocytoma

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_033

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Angiectasis |
| Uterus | Endometrium | Cyst, Nos |
| | | Endometrial Stromal Polyp |
| | | Leiomyoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_034

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Liver

Mammary gland

Uterus

Bile Duct

Endometrium

Cortical Adenoma

Hyperplasia, Nos

Cystic Disease

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_035

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|--------------------------------|
| Heart | Myocardium Nos | Inflammation, Chronic Focal |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Congestion, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_036

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|--------------|--------------------------------|
| Brain | Midbrain Nos | Atrophy, Pressure |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Adenocarcinoma, Nos |
| | | Cystic Disease |
| Ovary | | Cyst, Follicular Nos |
| Pituitary gland | | Adenoma, Nos |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_037

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|--------------|--------------------------------|
| Brain | Midbrain Nos | Atrophy, Pressure |
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| Pituitary gland | | Adenoma, Nos |
| Stomach | | Squamous Cell Papilloma |
| Unspecified | Axilla | Fibrosarcoma |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_038

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

Pancreas

Atrophy, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_039

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Pituitary gland | | Hyperplasia, Focal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_040

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Necrosis, Fat

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_041

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|-----------------|-------------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| Ovary | | Cyst, Nos |
| Pancreas | | Atrophy, Focal |
| Pituitary gland | | Angiectasis |
| Stomach | Forestomach | Hyperplasia, Epithelial |
| | Forestomach | Inflammation, Chronic Focal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_042

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Liver

Cytoplasmic Change, Basophilic

Deformity, Nos

Bile Duct

Hyperplasia, Nos

Pituitary gland

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_043

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Liver

Mammary gland

Uterus

Bile Duct

Pheochromocytoma

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Fibroadenoma

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_044

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_045

TRT#: 3

DOSE: 0

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Lung

Hyperplasia, Nos

Mammary gland

Bile Duct

Histiocytosis

Alveoli

Cystic Disease

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_046

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Kidney

Liver

Bile Duct

Mammary gland

Ovary

Pituitary gland

Thyroid

Uterus

Pheochromocytoma

Cystic Ducts

Nephrosis, Nos

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Disease

Cyst, Follicular Nos

Angiectasis

C-Cell Carcinoma

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_047

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney
Liver
Mammary gland
Uterus

Tubule
Bile Duct

Pigmentation, Nos
Hyperplasia, Nos
Fibroadenoma
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_048

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

| | | |
|-----------------|----------------|--------------------------------|
| Heart | Myocardium Nos | Inflammation, Focal |
| Intestine Small | Mesentery Nos | Necrosis, Fat |
| Liver | | Congestion, Nos |
| | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| Lung | | Congestion, Nos |
| | | Edema, Nos |
| | Alveoli | Histiocytosis |
| Mammary gland | | Cystic Disease |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_049

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Liver

Cytoplasmic Change, Basophilic

Deformity, Nos

Bile Duct

Hyperplasia, Nos

Mammary gland

Cystic Disease

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54717

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Allyl isovalerate

CAS Number: 2835-39-4

Date Report Requested: 10/26/2014

Time Report Requested: 14:12:50

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_050

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

| | | |
|---------------|-----------|--------------------------------|
| Liver | | Cytoplasmic Change, Basophilic |
| | Bile Duct | Hyperplasia, Nos |
| | | Neoplastic Nodule |
| Mammary gland | | Cystic Disease |
| | | Fibroadenoma |
| | | Galactocele |
| Pancreas | | Atrophy, Focal |
| Thyroid | | Hyperplasia, C Cell |
| Uterus | | Inflammation, Suppurative |

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE