

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

C Number: C55527

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Female

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_001

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Tunica Fibrosa	Mineralization
Heart		Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Salivary gland		Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_002

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Kidney

Larynx

Liver

Lung

Mammary gland

Nasal cavity

Pituitary gland

Stomach

Unspecified

Anterior Pituitary

Forestomach

Multiple Organs Nos

Hematopoiesis

Nephropathy

Inflammation, Suppurative

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Adenoma, Nos

Squamous Cell Carcinoma

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_003

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Lung		Foreign Body, Nos
		Inflammation, Suppurative
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Trachea		Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_004

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain		Carcinoma, Nos, Invasive
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Inflammation, Granulomatous Focal
Lung		Hyperplasia, Alveolar Epithelium
		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_005

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Kidney

Larynx

Liver

Mammary gland

Nasal cavity

Olfactory Sensory Epithelium

Degeneration, Lipoid

Atrophy, Nos

Nephropathy

Sarcoma, Nos

Inflammation, Suppurative

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Pituitary gland

Thyroid

Uterus

Anterior Pituitary

Adenoma, Nos

Hyperplasia, C Cell

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_006

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Necrosis, Nos
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Kidney		Nephropathy
Lymph node	Mandibular Lymph Node	Inflammation, Chronic
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
		Papillary Adenoma
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Stomach	Forestomach	Edema, Nos
	Forestomach	Hemorrhage
	Forestomach	Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_007

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Thrombosis, Nos
Heart		Thrombosis, Nos
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
		Necrosis, Nos
		Thrombosis, Nos
Lung		Histiocytosis
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
		Thrombosis, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Stomach	Glandular Stomach	Erosion
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Suppurative
	Glandular Stomach	Inflammation, Suppurative
	Forestomach	Ulcer, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_008

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortical Adenoma

Bone

Degeneration, Lipoid

Heart

Hyperostosis

Kidney

Inflammation, Chronic

Larynx

Nephropathy

Liver

Inflammation, Suppurative

Lung

Degeneration, Nos

Mammary gland

Bile Duct

Hyperplasia, Nos

Nasal cavity

Hemorrhage

Pituitary gland

Anterior Pituitary

Hyperplasia, Nos

Trachea

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Unspecified

Multiple Organs Nos

Degeneration, Cystic

Hyperplasia, Epithelial

Inflammation, Suppurative

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_009

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Heart

Kidney

Mammary gland

Nasal cavity

Olfactory Sensory Epithelium

Degeneration, Lipoid

Atrophy, Nos

Inflammation, Chronic

Nephropathy

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Pituitary gland

Anterior Pituitary

Degeneration, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_011

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Heart

Hyperplasia, Nos

Kidney

Inflammation, Chronic

Larynx

Nephropathy

Liver

Inflammation, Suppurative

Lung

Bile Duct

Hyperplasia, Focal

Mammary gland

Hyperplasia, Nos

Nasal cavity

Histiocytosis

Hyperplasia, Alveolar Epithelium

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Ovary

Atrophy, Nos

Pancreas

Atrophy, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Neurilemoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_012

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
Lung		Histiocytosis
Mammary gland		Hyperplasia, Alveolar Epithelium
		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Adenomatous
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Degeneration, Cystic
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_013

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Intestine Small

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Pituitary gland

Jejunum

Anterior Pituitary

Degeneration, Lipoid

Inflammation, Chronic

Parasitism

Nephropathy

Cytoplasmic Change, Basophilic

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Inflammation, Nos

Inflammation, Suppurative

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_014

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Nos

Medulla

Hyperplasia, Nos

Pheochromocytoma

Brain

Olfactory Sensory Epithelium

Atrophy, Nos

Heart

Inflammation, Chronic

Kidney

Nephropathy

Liver

Inflammation, Granulomatous Focal

Lung

Hyperplasia, Alveolar Epithelium

Mammary gland

Hyperplasia, Nos

Nasal cavity

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Metaplasia, Squamous

Ovary

Atrophy, Nos

Cyst, Nos

Pancreas

Atrophy, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Urinary bladder

Calculus, Microscopic Examination

Hyperplasia, Epithelial

Transitional-Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_015

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Clitoral gland

Hyperplasia, Nos

Heart

Hyperplasia, Epithelial

Kidney

Inflammation, Suppurative

Liver

Inflammation, Chronic

Lung

Nephropathy

Mammary gland

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Nasal cavity

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Pituitary gland

Anterior Pituitary

Carcinoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_016

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain		Hemorrhage
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Degeneration, Lipoid
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_017

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Cystic Degeneration, Lipoid
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
	Rectum	Parasitism
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
		Metaplasia, Squamous
Liver		Angiectasis Cytoplasmic Change, Basophilic Hyperplasia, Focal
Lung		Hyperplasia, Alveolar Epithelium Perivascular Cuffing
Lymph node	Renal Lymph Node	Congestion, Nos
	Thoracic Lymph Node	Congestion, Nos
Mammary gland		Adenoma, Nos Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial Inflammation, Nos Inflammation, Suppurative
Ovary		Metaplasia, Squamous Atrophy, Nos Granulosa-Cell Carcinoma
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Forestomach	Squamous Cell Papilloma
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_018

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Mammary gland

Nasal cavity

Degeneration, Lipoid

Inflammation, Chronic

Nephropathy

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Metaplasia, Squamous

Pancreas

Pituitary gland

Thyroid

Unspecified

Anterior Pituitary

Multiple Organs Nos

Atrophy, Nos

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_019

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain

Hemorrhage

Lung

Hemorrhage

Spleen

Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_020

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Larynx

Liver

Mammary gland

Nasal cavity

Degeneration, Lipoid

Inflammation, Chronic

Nephropathy

Inflammation, Suppurative

Inflammation, Granulomatous Focal

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_021

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Heart		Inflammation, Chronic
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
		Inflammation, Granulomatous Focal
Lung		Histiocytosis
		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pancreas	Islets	Islet-Cell Adenoma
Peritoneum	Peritoneal Cavity Nos	Necrosis, Fat
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Adipose Tissue	Fibrosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_022

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
	Medulla	Hyperplasia, Nos
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Larynx		Inflammation, Suppurative
Liver		Degeneration, Nos
	Bile Duct	Hyperplasia, Nos
Lung		Histiocytosis
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Adhesion, Fibrous
Trachea		Hyperplasia, Epithelial
		Inflammation, Suppurative
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_023

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Abscess, Nos
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Metaplasia, Squamous
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_024

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney		Nephropathy
		Nephrosis, Hydro
Larynx		Inflammation, Suppurative
Liver		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Lung		Fibrosarcoma, Metastatic
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Serous
		Inflammation, Suppurative
Peritoneum	Peritoneal Cavity Nos	Fibrosarcoma, Invasive
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Unspecified		Fibrosarcoma
Urinary bladder		Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_025

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Degeneration, Lipoid

Heart

Hyperplasia, Nos

Intestine Large

Inflammation, Chronic

Kidney

Parasitism

Liver

Nephropathy

Lung

Cytoplasmic Change, Basophilic

Mammary gland

Perivascular Cuffing

Nasal cavity

Fibroadenoma

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Metaplasia, Squamous

Pituitary gland

Anterior Pituitary

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_026

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Lung		Inflammation, Chronic Focal
		Inflammation, Granulomatous
		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Leukemia, Mononuclear Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_027

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
Ovary		Granulosa-Cell Tumor
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin		Acanthosis
		Inflammation, Suppurative
		Ulcer, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_028

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Liver		Degeneration, Lipoid
Mammary gland		Hyperplasia, Nos
Nasal cavity		Thrombosis, Nos
Peritoneum	Peritoneal Cavity Nos	Mesothelioma, Malignant
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Hemorrhage

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_029

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Medulla	Hyperplasia, Nos
Clitoral gland		Abscess, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Ovary		Atrophy, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Fibrosis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_030

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney
Liver

Lung
Lymph node
Mammary gland

Nasal cavity

Pituitary gland
Thyroid

Thoracic Lymph Node

Anterior Pituitary

Pheochromocytoma
Inflammation, Chronic
Nephropathy
Cytoplasmic Change, Basophilic
Inflammation, Granulomatous Focal
Perivascular Cuffing
Congestion, Nos
Fibroadenoma
Hyperplasia, Nos
Hyperplasia, Adenomatous
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Suppurative
Metaplasia, Squamous
Adenoma, Nos
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_031

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Liver

Lung

Mammary gland

Nasal cavity

Uterus

Endometrium

Degeneration, Lipoid

Inflammation, Chronic

Cytoplasmic Change, Basophilic

Perivascular Cuffing

Adenocarcinoma, Nos

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Endometrial Stromal Polyp

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_032

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Degeneration, Cystic
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_033

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Kidney

Hyperplasia, Nos

Liver

Nephropathy

Lung

Cytoplasmic Change, Basophilic

Mammary gland

Inflammation, Granulomatous Focal

Nasal cavity

Hyperplasia, Alveolar Epithelium

Perivascular Cuffing

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Pituitary gland

Anterior Pituitary

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_034

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Medulla	Hyperplasia, Nos
Brain	Olfactory Sensory Epithelium	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Chronic Focal
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Fibrosis
		Hematoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_035

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Clitoral gland

Heart

Kidney

Lung

Mammary gland

Nasal cavity

Pituitary gland

Anterior Pituitary

Abscess, Nos

Inflammation, Chronic

Nephropathy

Inflammation, Suppurative

Hyperplasia, Nos

Inflammation, Suppurative

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_036

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Heart		Thrombosis, Nos
Kidney		Nephropathy
Liver		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
		Pigmentation, Nos
Lung		Histiocytosis
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
		Thrombosis, Nos
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Erosion
	Glandular Stomach	Hemorrhage
	Glandular Stomach	Inflammation, Suppurative
Trachea		Hyperplasia, Epithelial
		Inflammation, Suppurative
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_037

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney

Degeneration, Lipoid
Infarct, Nos
Nephropathy

Liver

Thrombosis, Nos
Degeneration, Nos

Mammary gland

Bile Duct

Hyperplasia, Nos
Adenoma, Nos
Hyperplasia, Nos

Nasal cavity

Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Serous
Inflammation, Suppurative

Pancreas

Metaplasia, Squamous
Atrophy, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Spleen

Adhesion, Fibrous

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_038

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Hyperplasia, Epithelial
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Degeneration, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_039

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Carcinoma, Nos
Intestine Large	Colon	Parasitism
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
Lung		Histiocytosis
		Hyperplasia, Lymphoid
Mammary gland		Perivascular Cuffing
		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
		Papillary Adenoma
Thyroid		Hyperplasia, C Cell
Trachea		Inflammation, Nos
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_040

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland
Kidney
Liver
Lung
Mammary gland
Nasal cavity

Degeneration, Lipoid
Carcinoma, Nos
Nephropathy
Cytoplasmic Change, Basophilic
Perivascular Cuffing
Hyperplasia, Nos
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Serous
Inflammation, Suppurative
Metaplasia, Squamous
Atrophy, Nos
Adenoma, Nos
C-Cell Adenoma
Inflammation, Chronic

Pancreas
Pituitary gland
Thyroid
Unspecified

Anterior Pituitary

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_041

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Degeneration, Lipoid

Brain

Olfactory Sensory Epithelium

Hyperplasia, Nos

Kidney

Atrophy, Nos

Liver

Nephropathy

Lung

Degeneration, Lipoid

Mammary gland

Alveolar/Bronchiolar Adenoma

Nasal cavity

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Degeneration, Cystic

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_042

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Eye

Nasolacrimal Duct

Hyperplasia, Nos

Heart

Inflammation, Suppurative

Intestine Large

Colon

Inflammation, Nos

Kidney

Parasitism

Larynx

Nephropathy

Liver

Metaplasia, Squamous

Lung

Cytoplasmic Change, Basophilic

Mammary gland

Perivascular Cuffing

Nasal cavity

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Ovary

Thecoma

Pancreas

Atrophy, Nos

Thyroid

Hyperplasia, C Cell

Uterus

Endometrial Stromal Polyp

Endometrium

Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_043

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Clitoral gland		Inflammation, Suppurative
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Oral mucosa	Mouth Nos	Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Inflammation, Chronic
Thyroid		Carcinoma, Nos
Uterus		Hyperplasia, C Cell
		Leiomyoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_044

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Larynx

Liver

Mammary gland

Nasal cavity

Bile Duct

Pituitary gland

Thyroid

Unspecified

Anterior Pituitary

Multiple Organs Nos

Degeneration, Lipoid

Inflammation, Chronic

Thrombosis, Nos

Nephropathy

Inflammation, Suppurative

Degeneration, Lipoid

Hyperplasia, Nos

Hyperplasia, Nos

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Metaplasia, Squamous

Adenoma, Nos

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_045

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland

Cortex Nos

Hyperplasia, Nos

Abscess, Nos

Papilloma, Nos

Heart

Inflammation, Chronic

Kidney

Nephropathy

Lung

Hemorrhage

Perivascular Cuffing

Lymph node

Thoracic Lymph Node

Hemosiderosis

Mammary gland

Hyperplasia, Nos

Nasal cavity

Hyperostosis

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Metaplasia, Squamous

Pancreas

Atrophy, Nos

Parathyroid gland

Hyperplasia, Nos

Skin

Inflammation, Suppurative

Ulcer, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_046

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Kidney
Liver
Mammary gland
Nasal cavity

Degeneration, Lipoid
Nephropathy
Degeneration, Lipoid
Hyperplasia, Nos
Hyperostosis
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Serous
Inflammation, Suppurative
Metaplasia, Squamous

Pancreas
Pituitary gland
Spleen
Thyroid
Unspecified
Uterus

Anterior Pituitary

Multiple Organs Nos

Atrophy, Nos
Adenoma, Nos
Adhesion, Fibrous
Hyperplasia, C Cell
Leukemia, Mononuclear Cell
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_047

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
	Rectum	Parasitism
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
Lung		Hyperplasia, Alveolar Epithelium
		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_048

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Degeneration, Lipoid

Inflammation, Chronic

Nephropathy

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Histiocytosis

Hyperplasia, Nos

Hyperostosis

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_049

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Clitoral gland		Abscess, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
Lung	Bronchus	Inflammation, Suppurative
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Glandular Stomach	Inflammation, Nos
	Forestomach	Ulcer, Nos
	Glandular Stomach	Ulcer, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_050

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Eye	Lacrimal Apparatus	Inflammation, Nos
Heart		Inflammation, Chronic
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Serous
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hemosiderosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_001

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Kidney		Nephropathy
Liver		Degeneration, Lipoid
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Inflammation, Suppurative
	Glandular Stomach	Ulcer, Nos
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_002

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Eye	Lacrimal Apparatus	Inflammation, Nos
	Lacrimal Apparatus	Pigmentation, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Hemorrhage
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Spleen		Hemosiderosis
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_003

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Clitoral gland

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Pancreas

Pituitary gland

Spleen

Thyroid

Anterior Pituitary

Degeneration, Lipoid

Carcinoma, Nos, Invasive

Carcinoma, Nos

Inflammation, Chronic

Nephropathy

Inflammation, Granulomatous Focal

Necrosis, Nos

Perivascular Cuffing

Hyperplasia, Nos

Inflammation, Serous

Focal Cellular Change

Carcinoma, Nos

Leukemia, Mononuclear Cell

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_004

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Degeneration, Lipoid

Clitoral gland

Adenoma, Nos

Heart

Inflammation, Chronic

Kidney

Thrombosis, Nos

Liver

Nephropathy

Lung

Degeneration, Lipoid

Mammary gland

Inflammation, Chronic Focal

Nasal cavity

Hyperplasia, Nos

Ovary

Hyperplasia, Epithelial

Pituitary gland

Anterior Pituitary

Thrombosis, Nos

Thyroid

Adenocarcinoma, Nos

Unspecified

Multiple Organs Nos

Hyperplasia, Nos

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_005

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Abscess, Nos
Heart		Inflammation, Chronic
Intestine Large	Cecum, Colon	Hyperplasia, Lymphoid
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_006

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain	Olfactory Sensory Epithelium	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Lung		Congestion, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_007

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Intestine Large
Kidney
Liver

Colon

Parasitism
Nephropathy
Cytoplasmic Change, Basophilic
Hyperplasia, Nos
Inflammation, Granulomatous Focal

Bile Duct

Lung

Bronchus

Hyperplasia, Epithelial
Perivascular Cuffing
Hyperplasia, Nos

Mammary gland

Pituitary gland

Anterior Pituitary

Anterior Pituitary

Adenoma, Nos
Degeneration, Cystic

Thyroid

Unspecified

Multiple Organs Nos

C-Cell Adenoma
Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_008

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
Lung		Perivascular Cuffing
Lymph node	Renal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hemosiderosis
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_009

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Degeneration, Lipoid
Hyperplasia, Nos
Inflammation, Chronic
Nephropathy
Inflammation, Suppurative
Cytoplasmic Change, Basophilic
Leukemia, Mononuclear Cell
Hyperplasia, Lymphoid
Perivascular Cuffing
Hyperplasia, Nos
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Suppurative
Atrophy, Nos
Adenoma, Nos
C-Cell Carcinoma

Heart

Kidney

Larynx

Liver

Lung

Mammary gland

Nasal cavity

Pancreas

Pituitary gland

Thyroid

Anterior Pituitary

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_010

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid Necrosis, Nos
Blood vessel		Aneurysm
Bone		Fibrous Osteodystrophy
Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney	Pelvis	Hyperplasia, Epithelial Nephropathy
Larynx		Inflammation, Suppurative
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Suppurative
Pancreas		Atrophy, Nos Perivasculitis
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Multiple Organs Nos	Mineralization Perivasculitis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_011

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos Pheochromocytoma
Bone		Fibrous Osteodystrophy
Brain	Olfactory Sensory Epithelium	Atrophy, Nos Inflammation, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Lung		Histiocytosis
Lymph node	Renal Lymph Node	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial Inflammation, Nos Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Unspecified	Multiple Organs Nos	Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_012

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Lacrimal Apparatus	Inflammation, Chronic
	Nasolacrimal Duct	Inflammation, Suppurative
	Lacrimal Apparatus	Metaplasia, Squamous
Nasal cavity		Metaplasia, Squamous
Oral mucosa	Mouth Nos	Inflammation, Chronic
Unspecified	Foot Nos	Hemorrhage
	Foot Nos	Inflammation, Acute/Chronic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_013

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Hyperplasia, Epithelial
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
		Thrombosis, Nos
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Inflammation, Suppurative
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_014

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Eye

Heart

Kidney

Liver

Mammary gland

Nasal cavity

Pituitary gland

Thyroid

Medulla

Olfactory Sensory Epithelium

Lacrimal Apparatus

Lacrimal Apparatus

Anterior Pituitary

Degeneration, Lipoid

Hyperplasia, Nos

Hemorrhage

Inflammation, Suppurative

Inflammation, Nos

Pigmentation, Nos

Inflammation, Chronic

Nephropathy

Inflammation, Granulomatous Focal

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Metaplasia, Squamous

Adenoma, Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_015

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Degeneration, Lipoid

Heart

Inflammation, Chronic

Kidney

Nephropathy

Larynx

Inflammation, Suppurative

Liver

Cytoplasmic Change, Basophilic

Lung

Perivascular Cuffing

Mammary gland

Hyperplasia, Nos

Nasal cavity

Inflammation, Granulomatous Focal

Ovary

Inflammation, Nos

Pituitary gland

Anterior Pituitary

Inflammation, Suppurative

Spleen

Atrophy, Nos

Thyroid

Adenoma, Nos

Trachea

Fibrosis

C-Cell Carcinoma

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_016

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Degeneration, Lipoid

Pheochromocytoma

Brain

Thrombosis, Nos

Heart

Inflammation, Chronic

Thrombosis, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Lung

Hyperplasia, Alveolar Epithelium

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Nos

Pituitary gland

Anterior Pituitary

Degeneration, Cystic

Anterior Pituitary

Hyperplasia, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_017

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland

Heart
Kidney
Liver

Mammary gland
Nasal cavity

Pituitary gland
Unspecified

Anterior Pituitary
Multiple Organs Nos

Cortical Adenoma
Abscess, Nos
Carcinoma, Nos
Inflammation, Chronic
Nephropathy
Cytoplasmic Change, Basophilic
Inflammation, Granulomatous Focal
Hyperplasia, Nos
Hyperplasia, Epithelial
Inflammation, Nos
Carcinoma, Nos
Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_018

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain		Carcinoma, Nos, Invasive
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
Thymus		Thymoma, Malignant
Thyroid		Hyperplasia, C Cell
Uterus		Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_019

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Bone marrow		Fibrosis
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
	Olfactory Sensory Epithelium	Inflammation, Suppurative
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Degeneration, Lipoid
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Skin		Inflammation, Suppurative
		Ulcer, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Forestomach	Ulcer, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_020

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Clitoral gland		Inflammation, Suppurative
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Necrosis, Nos
		Regeneration, Nos
Lung		Histiocytosis
		Hyperplasia, Alveolar Epithelium
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Tongue		Squamous Cell Papilloma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_021

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Degeneration, Lipoid
		Hyperplasia, Nos
		Inflammation, Granulomatous Focal
Lung		Congestion, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Serous
Ovary		Atrophy, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_023

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Intestine Small	Ileum	Leiomyoma
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver	Bile Duct	Hyperplasia, Nos
Lung		Histiocytosis
		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_024

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Medulla	Hyperplasia, Nos
Clitoral gland		Adenoma, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
		Inflammation, Granulomatous Focal
Nasal cavity		Inflammation, Nos
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Skin		Inflammation, Suppurative
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_025

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Intestine Large

Kidney

Liver

Mammary gland

Nasal cavity

Colon

Bile Duct

Ovary

Pancreas

Pituitary gland

Unspecified

Anterior Pituitary

Multiple Organs Nos

Degeneration, Lipoid

Inflammation, Chronic

Parasitism

Nephropathy

Hyperplasia, Nos

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Suppurative

Metaplasia, Squamous

Atrophy, Nos

Atrophy, Nos

Degeneration, Cystic

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_026

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland
Kidney
Lung
Mammary gland
Nasal cavity

Carcinoma, Nos
Nephropathy
Hemorrhage
Hyperplasia, Nos
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Suppurative
Metaplasia, Squamous
Adenoma, Nos
Leukemia, Mononuclear Cell

Pituitary gland
Unspecified

Anterior Pituitary
Multiple Organs Nos

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_027

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Brain

Eye

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Ovary

Pituitary gland

Olfactory Sensory Epithelium

Nasolacrimal Duct

Anterior Pituitary

Cortical Adenoma

Atrophy, Nos

Inflammation, Suppurative

Inflammation, Chronic

Nephropathy

Cytoplasmic Change, Basophilic

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Atrophy, Nos

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_028

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Bone marrow		Fibrosis
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Lung		Hemorrhage
		Histiocytosis
		Hyperplasia, Alveolar Epithelium
Mammary gland		Inflammation, Chronic Focal
Unspecified	Multiple Organs Nos	Hyperplasia, Nos
		Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_029

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid
Hyperplasia, Nos
Inflammation, Chronic
Nephropathy
Cytoplasmic Change, Basophilic
Perivascular Cuffing
Hyperplasia, Epithelial
Inflammation, Nos
Inflammation, Suppurative
Adenoma, Nos
Degeneration, Cystic
Cyst, Epidermal Inclusion
Hyperplasia, C Cell

Heart

Kidney

Liver

Lung

Nasal cavity

Pituitary gland

Anterior Pituitary

Anterior Pituitary

Stomach

Glandular Stomach

Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_030

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Hyperplasia, Epithelial
		Inflammation, Nos
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		C-Cell Adenoma
Trachea		Hyperplasia, Epithelial
		Inflammation, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_031

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Serous
		Inflammation, Suppurative
		Metaplasia, Squamous
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Fibrosis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_032

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperostosis
		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Perineum Nos	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_033

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos Pheochromocytoma
Brain	Olfactory Sensory Epithelium Olfactory Sensory Epithelium	Atrophy, Nos Inflammation, Suppurative
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hemangiosarcoma Hematopoiesis Necrosis, Nos
Lung		Hemosiderosis
Lymph node	Thoracic Lymph Node	Congestion, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial Inflammation, Nos Inflammation, Serous Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Skin		Inflammation, Suppurative Ulcer, Nos
Spleen		Hematopoiesis
Stomach	Glandular Stomach	Erosion
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Forestomach	Ulcer, Nos
Unspecified	Multiple Organs Nos	Hyperplasia, Mesothelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_034

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Abscess, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Lymph node	Renal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Nasal cavity		Hyperplasia, Epithelial
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hemosiderosis
Stomach	Glandular Stomach	Inflammation, Suppurative
	Glandular Stomach	Ulcer, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_035

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Suppurative
Kidney		Nephropathy
Larynx		Hyperplasia, Epithelial
		Inflammation, Suppurative
Liver		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
		Inflammation, Chronic
		Inflammation, Granulomatous Focal
Lung		Fibrosis
		Histiocytosis
Lymph node	Thoracic Lymph Node	Inflammation, Chronic
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Serous
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_037

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Focal Cellular Change

Eye

Retina

Atrophy, Nos

Heart

Crystalline Lens

Degeneration, Nos

Kidney

Inflammation, Chronic

Larynx

Nephropathy

Mammary gland

Inflammation, Suppurative

Fibroadenoma

Galactocele

Hyperplasia, Nos

Nasal cavity

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Pituitary gland

Anterior Pituitary

Hyperplasia, Nos

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_038

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_039

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Bone	Sternum	Inflammation, Nos
Heart		Inflammation, Chronic
Kidney		Granulosa-Cell Carcinoma, Invasive
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
	Periportal	Inflammation, Granulomatous Focal
Lung		Inflammation, Nos
Lymph node	Thoracic Lymph Node	Perivascular Cuffing
Nasal cavity		Hyperplasia, Nos
		Hyperplasia, Epithelial
Ovary		Inflammation, Serous
		Atrophy, Nos
Pancreas		Granulosa-Cell Carcinoma
		Focal Cellular Change
		Granulosa-Cell Carcinoma, Invasive
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Thyroid		Hyperplasia, C Cell
		Inflammation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_040

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Clitoral gland		Inflammation, Chronic
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_041

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain	Cortex Nos Olfactory Sensory Epithelium	Hyperplasia, Nos Atrophy, Nos Carcinoma, Nos, Invasive
Clitoral gland		Inflammation, Chronic Inflammation, Suppurative
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Inflammation, Granulomatous Focal
Lung		Histiocytosis Perivascular Cuffing
Lymph node	Renal Lymph Node	Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial Inflammation, Nos Inflammation, Serous Inflammation, Suppurative
Ovary		Metaplasia, Squamous Cyst, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_042

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid Pheochromocytoma
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
Mammary gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Degeneration, Cystic
Salivary gland		Metaplasia, Squamous
Spleen		Fibrosis
		Hematoma, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Forestomach	Ulcer, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_043

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Brain	Olfactory Sensory Epithelium	Atrophy, Nos
Clitoral gland		Adenoma, Nos
Heart		Inflammation, Chronic
Kidney		Hyperplasia, Tubular Cell
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lung		Histiocytosis
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_044

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic Inflammation, Granulomatous Focal
Lung		Histiocytosis Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperostosis Hyperplasia, Epithelial Inflammation, Nos Inflammation, Serous Inflammation, Suppurative
Pancreas	Islets	Metaplasia, Squamous Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_045

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Pancreas

Pituitary gland

Spleen

Thyroid

Anterior Pituitary

Degeneration, Lipoid

Inflammation, Chronic

Nephropathy

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Inflammation, Granulomatous Focal

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Inflammation, Nos

Inflammation, Serous

Atrophy, Nos

Carcinoma, Nos

Leukemia, Mononuclear Cell

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_046

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Blood vessel		Perivascularitis
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Hyperplasia, Epithelial
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Hemorrhage
		Hyperplasia, Alveolar Epithelium
Mammary gland		Perivascular Cuffing
		Adenocarcinoma, Nos
		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Trachea		Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_047

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
		Inflammation, Granulomatous Focal
Nasal cavity		Inflammation, Serous
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Spleen		Fibrosis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_048

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Lung		Histiocytosis
		Hyperplasia, Alveolar Epithelium
		Perivascular Cuffing
Mammary gland		Fibroadenoma
Nasal cavity		Inflammation, Nos
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin		Inflammation, Suppurative
Stomach	Forestomach	Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Tooth		Congenital Malformation, Nos
Unspecified	Leg	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_049

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Clitoral gland

Hyperplasia, Nos

Heart

Inflammation, Suppurative

Kidney

Thrombosis, Nos

Larynx

Nephropathy

Liver

Inflammation, Suppurative

Bile Duct

Degeneration, Nos

Mammary gland

Hyperplasia, Nos

Nasal cavity

Pigmentation, Nos

Hyperplasia, Nos

Hyperplasia, Epithelial

Inflammation, Nos

Inflammation, Serous

Inflammation, Suppurative

Metaplasia, Squamous

Thrombosis, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Cyst, Nos

Spleen

Fibrosis

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Uterus

Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_050

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 200 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos
Bone		Fibrous Osteodystrophy
Ear		Inflammation, Chronic
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
		Thrombosis, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Serous
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin		Squamous Cell Papilloma
Unspecified	Multiple Organs Nos	Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_001

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_002

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin		Inflammation, Suppurative
Tongue		Cyst, Epidermal Inclusion
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_003

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid Hyperplasia, Nos Pheochromocytoma
Clitoral gland		Carcinoma, Nos
Kidney		Nephropathy
Larynx		Hyperplasia, Epithelial Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic Inflammation, Granulomatous Focal
Lung		Hyperplasia, Lymphoid Perivascular Cuffing
Mammary gland		Fibroadenoma Hyperplasia, Nos
Nasal cavity		Inflammation, Nos Inflammation, Suppurative
Pancreas		Focal Cellular Change
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_004

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
	Medulla	Hyperplasia, Nos
Bone		Cyst, Epidermal Inclusion
		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Lipoid
		Necrosis, Nos
Mammary gland		Hyperplasia, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Degeneration, Cystic
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

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

Adrenal gland		Degeneration, Lipoid
Brain		Granular-Cell Tumor, Nos
Heart		Inflammation, Chronic
		Thrombosis, Nos
Kidney		Nephropathy
Liver		Necrosis, Nos
Lung		Histiocytosis
		Inflammation, Chronic Focal
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Thrombosis, Nos
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Erosion
	Forestomach	Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_006

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Kidney		Endometrial Stromal Sarcoma, Metastatic
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
		Leukemia, Mononuclear Cell
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Thymus		Hyperplasia, Epithelial
Thyroid		C-Cell Adenoma
Uterus		Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_007

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Degeneration, Lipoid
	Bile Duct	Hyperplasia, Nos
Lung		Erythrophagocytosis
		Hemorrhage
		Histiocytosis
Lymph node	Thoracic Lymph Node	Congestion, Nos
	Renal Lymph Node	Pigmentation, Nos
Mammary gland		Hyperplasia, Nos
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Adhesion, Fibrous
Thyroid		Hyperplasia, C Cell
Unspecified	Adipose Tissue	Inflammation, Suppurative
	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_008

TRT#: 3

DOSE: 0

SEX: Female

DISP: Natural Death

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Heart

Kidney

Liver

Mammary gland

Ovary

Pituitary gland

Thyroid

Unspecified

Anterior Pituitary

Multiple Organs Nos

Degeneration, Lipoid

Inflammation, Suppurative

Inflammation, Chronic

Nephropathy

Pigmentation, Nos

Hyperplasia, Nos

Atrophy, Nos

Carcinoma, Nos

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_009

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Medulla

Hyperplasia, Nos

Clitoral gland

Hyperplasia, Nos

Eye

Nasolacrimal Duct

Inflammation, Chronic

Heart

Inflammation, Suppurative

Kidney

Inflammation, Chronic

Liver

Nephropathy

Bile Duct

Cytoplasmic Change, Basophilic

Lung

Hyperplasia, Nos

Inflammation, Granulomatous Focal

Mammary gland

Hyperplasia, Alveolar Epithelium

Nasal cavity

Perivascular Cuffing

Pancreas

Hyperplasia, Nos

Inflammation, Nos

Pituitary gland

Anterior Pituitary

Atrophy, Nos

Uterus

Focal Cellular Change

Adenoma, Nos

Endometrial Stromal Sarcoma

Endometrium

Hyperplasia, Nos

Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_010

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Degeneration, Lipoid
Inflammation, Granulomatous Focal

Heart

Inflammation, Chronic

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic
Inflammation, Granulomatous Focal

Lung

Alveolar/Bronchiolar Carcinoma

Mammary gland

Hyperplasia, Nos

Nasal cavity

Hyperplasia, Epithelial

Pancreas

Inflammation, Nos

Pituitary gland

Anterior Pituitary

Atrophy, Nos

Anterior Pituitary

Pigmentation, Nos

Thyroid

Carcinoma, Nos

Unspecified

Multiple Organs Nos

Degeneration, Cystic

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_011

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Lung		Hyperplasia, Alveolar Epithelium
		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_012

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Intestine Large

Rectum

Parasitism

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Lung

Hemorrhage

Perivascular Cuffing

Mammary gland

Hyperplasia, Nos

Nasal cavity

Inflammation, Nos

Pituitary gland

Anterior Pituitary

Degeneration, Cystic

Anterior Pituitary

Hyperplasia, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Adipose Tissue

Fibrosis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_013

TRT#: 3

DOSE: 0

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Inflammation, Interstitial
		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Inflammation, Granulomatous Focal
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_014

TRT#: 3

DOSE: 0

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Pancreas

Pituitary gland

Nose Nos

Anterior Pituitary

Degeneration, Lipoid

Inflammation, Chronic

Nephropathy

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Perivascular Cuffing

Fibroadenoma

Hyperplasia, Nos

Inflammation, Nos

Atrophy, Nos

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_015

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney
Liver

Cortex Nos

Hyperplasia, Nos
Inflammation, Chronic
Nephropathy
Cytoplasmic Change, Basophilic
Cytoplasmic Vacuolization
Hemorrhage
Inflammation, Granulomatous Focal
Perivascular Cuffing
Hyperplasia, Nos
Inflammation, Nos
Hyperplasia, Nos

Lung
Mammary gland
Nasal cavity
Pituitary gland

Anterior Pituitary

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_016

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Inflammation, Suppurative
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
		Inflammation, Chronic
Nasal cavity		Inflammation, Nos
		Inflammation, Suppurative
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_017

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Focal Inflammation, Granulomatous Focal
Lung		Hemorrhage Perivascular Cuffing
Lymph node	Renal Lymph Node	Pigmentation, Nos
Mammary gland		Inflammation, Suppurative
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Salivary gland		Hyperplasia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_018

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Clitoral gland		Inflammation, Suppurative
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Degeneration, Nos
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_019

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos Pheochromocytoma
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver	Bile Duct	Degeneration, Lipoid Hyperplasia, Nos Thrombosis, Nos
Lymph node	Thoracic Lymph Node	Inflammation, Chronic
Mammary gland		Hyperplasia, Nos
Nasal cavity		Thrombosis, Nos
Ovary		Atrophy, Nos
Pancreas		Atrophy, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_020

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Lung		Perivascular Cuffing
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
		Inflammation, Suppurative
		Metaplasia, Squamous
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

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

Brain		Hemorrhage
Kidney		Nephropathy
Liver		Degeneration, Lipoid
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Stomach	Glandular Stomach	Erosion
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_022

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Degeneration, Lipoid

Heart

Pheochromocytoma

Kidney

Inflammation, Chronic

Liver

Nephropathy

Lung

Cytoplasmic Change, Basophilic

Mammary gland

Inflammation, Granulomatous Focal

Nasal cavity

Histiocytosis

Pituitary gland

Anterior Pituitary

Hyperplasia, Nos

Intermedia

Inflammation, Nos

Unspecified

Multiple Organs Nos

Inflammation, Suppurative

Adenoma, Nos

Adenoma, Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

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

Bone		Fibrous Osteodystrophy
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Hyperplasia, Epithelial
		Inflammation, Nos
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
Stomach	Forestomach	Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Hemorrhage

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_024

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Angiectasis

Degeneration, Lipoid

Cortex Nos

Hyperplasia, Nos

Heart

Inflammation, Chronic

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Lung

Inflammation, Chronic Focal

Mammary gland

Hyperplasia, Nos

Pancreas

Atrophy, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_025

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_026

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Nos

Bone

Hyperostosis

Heart

Inflammation, Chronic

Intestine Large

Colon

Parasitism

Kidney

Nephropathy

Mammary gland

Hyperplasia, Nos

Pituitary gland

Anterior Pituitary

Degeneration, Cystic

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_027

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_028

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain		Carcinoma, Nos, Invasive
Clitoral gland		Inflammation, Suppurative
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Kidney		Nephropathy
Liver		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Spleen		Hemosiderosis
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Forestomach	Ulcer, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_029

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Degeneration, Nos
	Nasolacrimal Duct	Inflammation, Suppurative
	Crystalline Lens	Mineralization
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Hematopoiesis
		Necrosis, Nos
Lung		Leukocytosis, Nos
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Spleen		Hematopoiesis
Thymus		Hyperplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Nos
		Inflammation, Suppurative
		Sarcoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_030

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Degeneration, Lipoid

Eye

Lacrimal Apparatus

Hyperplasia, Nos

Heart

Inflammation, Nos

Kidney

Inflammation, Chronic

Liver

Nephropathy

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Necrosis, Nos

Pigmentation, Nos

Mammary gland

Fibroadenoma

Hyperplasia, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_031

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Heart

Hyperplasia, Nos

Intestine Large

Inflammation, Chronic

Kidney

Parasitism

Liver

Nephropathy

Lung

Cytoplasmic Change, Basophilic

Mammary gland

Inflammation, Granulomatous Focal

Nasal cavity

Perivascular Cuffing

Pancreas

Fibroadenoma

Pituitary gland

Inflammation, Nos

Thyroid

Anterior Pituitary

Atrophy, Nos

Adenoma, Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_032

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:46

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_033

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
Mammary gland		Adenoma, Nos
Nasal cavity		Thrombosis, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Inflammation, Suppurative
	Glandular Stomach	Ulcer, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp
		Inflammation, Suppurative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_034

TRT#: 3

DOSE: 0

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Clitoral gland

Heart

Kidney

Liver

Lung

Mammary gland

Nasal cavity

Pituitary gland

Thyroid

Anterior Pituitary

Abscess, Nos

Inflammation, Chronic

Nephropathy

Congestion, Nos

Inflammation, Granulomatous Focal

Perivascular Cuffing

Galactocele

Hyperplasia, Nos

Inflammation, Nos

Adenoma, Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_035

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Inflammation, Granulomatous Focal
Pigmentation, Nos

Heart

Inflammation, Chronic

Kidney

Nephropathy

Liver

Inflammation, Granulomatous Focal

Periportal

Inflammation, Nos

Mammary gland

Hyperplasia, Nos

Nasal cavity

Inflammation, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_036

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain		Carcinoma, Nos, Invasive
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_037

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Clitoral gland

Heart
Intestine Large
Kidney
Larynx

Liver

Lung
Mammary gland
Nasal cavity

Pancreas
Pituitary gland
Thyroid

Rectum

Anterior Pituitary

Degeneration, Lipoid
Abscess, Nos
Adenoma, Nos
Inflammation, Chronic
Parasitism
Nephropathy
Hyperplasia, Epithelial
Inflammation, Suppurative
Angiectasis
Cytoplasmic Change, Basophilic
Hyperplasia, Focal
Inflammation, Granulomatous Focal
Perivascular Cuffing
Hyperplasia, Nos
Hyperplasia, Epithelial
Inflammation, Nos
Atrophy, Nos
Adenoma, Nos
C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_038

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone		Inflammation, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Degeneration, Lipoid
		Inflammation, Granulomatous Focal
Lung		Alveolar/Bronchiolar Adenoma
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_039

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Degeneration, Lipoid Pheochromocytoma
Eye	Nasolacrimal Duct	Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Focal
Lung		Inflammation, Chronic Focal
Mammary gland		Fibroadenoma Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell Metaplasia, Osseous
Uterus		Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_040

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Cyst, Nos
Heart		Inflammation, Chronic
Larynx		Hyperplasia, Epithelial
		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_041

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Hyperplasia, Nos

Necrosis, Nos

Brain

Hemorrhage

Olfactory Sensory Epithelium

Inflammation, Suppurative

Necrosis, Nos

Kidney

Nephropathy

Larynx

Inflammation, Suppurative

Liver

Degeneration, Lipoid

Mammary gland

Hyperplasia, Nos

Pituitary gland

Anterior Pituitary

Degeneration, Cystic

Stomach

Glandular Stomach

Erosion

Forestomach

Hyperplasia, Epithelial

Forestomach

Inflammation, Suppurative

Glandular Stomach

Inflammation, Suppurative

Forestomach

Ulcer, Nos

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_042

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Kidney

Larynx

Liver

Lung

Mammary gland

Ovary

Peritoneum

Pituitary gland

Unspecified

Peritoneal Cavity Nos

Anterior Pituitary

Multiple Organs Nos

Nephropathy

Inflammation, Suppurative

Cytoplasmic Change, Basophilic

Hepatocellular Carcinoma

Neurofibrosarcoma, Metastatic

Perivascular Cuffing

Adenocarcinoma, Nos

Hyperplasia, Nos

Cyst, Nos

Neurofibrosarcoma

Adenoma, Nos

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_043

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Clitoral gland

Hyperplasia, Nos

Heart

Abscess, Nos

Kidney

Inflammation, Chronic

Larynx

Nephropathy

Liver

Inflammation, Suppurative

Bile Duct

Cytoplasmic Change, Basophilic

Lung

Hyperplasia, Nos

Mammary gland

Inflammation, Granulomatous Focal

Thyroid

Perivascular Cuffing

Hyperplasia, Nos

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_044

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Large

Cortex Nos

Hyperplasia, Nos
Inflammation, Chronic

Kidney
Liver
Lung
Mammary gland

Colon
Rectum

Parasitism
Parasitism
Nephropathy
Cytoplasmic Change, Basophilic
Perivascular Cuffing

Pancreas
Thyroid

Unspecified

Multiple Organs Nos

Fibroadenoma
Atrophy, Nos
Hyperplasia, C Cell
Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_045

TRT#: 3

DOSE: 0

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST:

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney
Liver

Degeneration, Lipoid
Inflammation, Chronic
Nephropathy
Cytoplasmic Change, Basophilic
Inflammation, Granulomatous Focal

Lung
Mammary gland

Inflammation, Chronic Focal

Pituitary gland
Thyroid
Unspecified

Anterior Pituitary

Hyperplasia, Nos
Inflammation, Chronic

Multiple Organs Nos

Degeneration, Cystic
Hyperplasia, C Cell
Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_046

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Atrophy, Nos
	Crystalline Lens	Degeneration, Nos
	Crystalline Lens	Mineralization
Heart		Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_047

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
		Inflammation, Granulomatous Focal
		Inflammation, Suppurative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp
		Leiomyoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_048

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Clitoral gland

Eye

Heart

Kidney

Liver

Mammary gland

Nasal cavity

Pancreas

Pituitary gland

Thyroid

Nasolacrimal Duct

Anterior Pituitary

Degeneration, Lipoid

Inflammation, Suppurative

Inflammation, Suppurative

Inflammation, Chronic

Nephropathy

Cytoplasmic Change, Basophilic

Inflammation, Granulomatous Focal

Fibroadenoma

Hyperplasia, Nos

Inflammation, Nos

Atrophy, Nos

Adenoma, Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_049

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney		Nephropathy
Larynx		Inflammation, Suppurative
Liver		Cytoplasmic Change, Basophilic
		Inflammation, Granulomatous Focal
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Ovary		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55527

Test Type: Long-Term

Route: Inhalation

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 1,2-Epoxybutane

CAS Number: 106-88-7

Date Report Requested: 10/26/2014

Time Report Requested: 16:15:47

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_050

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Heart		Inflammation, Chronic
Liver		Inflammation, Granulomatous Focal
Lung		Perivascular Cuffing
Mammary gland		Hyperplasia, Nos
Nasal cavity		Inflammation, Nos
Pancreas		Atrophy, Nos
Pituitary gland	Anterior Pituitary	Degeneration, Cystic
	Anterior Pituitary	Hyperplasia, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****