

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

**C Number:** C08991

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Female

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_001

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Myocardium Nos

Tubule

Liver

Lung

Lymph node

Mandibular Lymph Node

Mesenteric Lymph Node

Mammary gland

Pituitary gland

Spleen

Stomach

Cortical Adenoma

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Granuloma, Nos

Inflammation, Chronic

Hyperplasia, Lymphoid

Hyperplasia, Reticulum Cell

Adenocarcinoma, Nos

Fibroadenoma

Hyperplasia, Diffuse

Adenoma, Nos

Hematopoiesis

Acanthosis

Inflammation, Chronic Diffuse

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_002

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Kidney		Mineralization
Liver		Leukocytosis, Nos
Lung		Inflammation, Chronic
Spleen		Hematopoiesis
Stomach		Necrosis, Focal
Unspecified	Multiple Organs Nos	Hyperplasia, Lymphoid
Uterus		Endometrial Stromal Sarcoma
	Cervix Uteri	Endometrial Stromal Sarcoma, Invasive

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_003

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Medulla

Hyperplasia, Focal

Kidney

Cortex Nos

Metamorphosis, Fatty

Liver

Inflammation, Chronic

Pituitary gland

Mineralization

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Cyst, Nos

Lymphoma, Undifferentiated-Malignant Type

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_004

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Esophagus

Cortex Nos

Metamorphosis, Fatty

Kidney

Hyperkeratosis

Liver

Inflammation, Chronic

Mineralization

Lung

Focal Cellular Change

Lymph node

Granuloma, Nos

Pigmentation, Nos

Mammary gland

Inflammation, Chronic

Pituitary gland

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Stomach

Mandibular Lymph Node

Pigmentation, Nos

Cystic Ducts

Adenoma, Nos

Acanthosis

Hyperkeratosis

Thyroid

Inflammation, Chronic Focal

Follicular-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:33

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_005

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla  
Cortex Nos

Cortical Adenoma  
Hyperplasia, Focal  
Metamorphosis, Fatty  
Pheochromocytoma

Eye  
Heart  
Kidney

Retina  
Myocardium Nos

Degeneration, Nos  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos  
Metamorphosis, Fatty  
Pigmentation, Nos

Lung

Alveoli

Histiocytosis  
Inflammation, Chronic  
Inflammation, Interstitial

Lymph node  
Mammary gland

Mesenteric Lymph Node

Atrophy, Nos  
Abscess, Nos  
Cystic Ducts  
Hyperplasia, Nos

Pancreas  
Pituitary gland  
Unspecified  
Zymbal gland

Multiple Organs Nos

Atrophy, Focal  
Adenoma, Nos  
Leukemia, Monocytic  
Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:33

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_006

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hepatitis, Toxic
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Spleen		Fibrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp
Zymbal gland		Squamous Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:33

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_007

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Medulla

Hyperplasia, Focal

Eye

Hyperplasia, Focal

Cataract

Heart

Retina

Degeneration, Nos

Kidney

Myocardium Nos

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Liver

Tubule

Pigmentation, Nos

Lung

Focal Cellular Change

Hemorrhage

Lymph node

Mesenteric Lymph Node

Inflammation, Chronic

Mammary gland

Hyperplasia, Reticulum Cell

Adenocarcinoma, Nos

Cystic Ducts

Fibroadenoma

Hyperplasia, Diffuse

Ovary

Cyst, Nos

Parathyroid gland

Adenoma, Nos

Pituitary gland

Adenoma, Nos

Unspecified

Neurofibroma

Zymbal gland

Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:33

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_008

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Medulla

Hyperplasia, Focal

Cortex Nos

Metamorphosis, Fatty

Bone marrow

Hypoplasia, Nos

Eye

Retina

Degeneration, Nos

Heart

Myocardium Nos

Inflammation, Chronic Focal

Intestine Small

Mesentery Nos

Inflammation, Chronic Focal

Kidney

Inflammation, Chronic

Mineralization

Liver

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Cyst, Nos

Stomach

Acanthosis

Hyperkeratosis

Inflammation, Chronic Diffuse

Necrosis, Focal

Ulcer, Perforated

Thyroid

C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:33

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_009

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Medulla Cortex Nos	Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Brain	Cerebrum	Carcinoma, Nos, Invasive
Eye	Cornea	Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney	Cortex	Cyst, Nos Inflammation, Chronic
Liver		Focal Cellular Change Granuloma, Nos Metamorphosis, Fatty
Lung		Inflammation, Chronic
Pituitary gland		Carcinoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
Thyroid	Fundus	Hyperplasia, Diffuse
Unspecified	Multiple Organs Nos	Cyst, Follicular Nos
	Multiple Organs Nos	Degeneration, Nos
	Multiple Organs Nos	Fibrous Osteodystrophy
Zymbal gland		Mineralization Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:33

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_00A

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Liver		Hepatitis, Toxic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
		Galactocele
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
		Angiectasis
Preputial gland		Abscess, Nos
		Hyperplasia, Diffuse
Skin		Squamous Cell Papilloma
Spleen	Capsule	Fibrosis, Diffuse
	Capsule	Hemorrhage
Stomach		Acanthosis
		Hyperkeratosis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Inflammation, Chronic
	Multiple Organs Nos	Leukemia, Monocytic
	Chest	Neurofibroma
Uterus		Endometrial Stromal Polyp
Vagina		Acanthosis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_010

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large

Colon

Leiomyosarcoma

Cecum, Colon

Parasitism

Colon

Parasitism

Kidney

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Cystic Ducts

Pituitary gland

Adenoma, Nos

Unspecified

Back

Fibroma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_011

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Terminal Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
Eye		Cataract
	Retina	Degeneration, Nos
		Hemorrhage
	Cornea	Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Metamorphosis, Fatty
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pancreas	Acinus	Hyperplasia, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Angiectasis
Stomach		Acanthosis
		Inflammation, Chronic Focal
		Necrosis, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_012

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Angiectasis
		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos
		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Uterus		Endometrial Stromal Polyp
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_013

**TRT#:** 1  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Eye	Cortex Nos Retina Cornea	Metamorphosis, Fatty Degeneration, Nos Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
Liver		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node Mesenteric Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos Fibroadenoma
Pancreas	Islets	Islet-Cell Adenoma
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_014

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Hepatitis, Toxic Necrosis, Focal
Liver		Inflammation, Chronic
Lung		Hyperplasia, Reticulum Cell
Lymph node	Mesenteric Lymph Node	Adenoma, Nos Fibroadenoma Galactocele
Mammary gland		Cyst, Hemorrhagic Hyperplasia, Focal
Pituitary gland		Hematopoiesis
Spleen		Inflammation, Acute Focal
Stomach		Necrosis, Focal
Unspecified		Fibrosarcoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_015

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney

Colon

Parasitism  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Necrosis, Focal

Lung  
Mammary gland

Inflammation, Chronic  
Adenocarcinoma, Nos  
Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Uterus

Hydrometra

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_016

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Nos
	Medulla	Hyperplasia, Focal
Brain	Cerebrum	Carcinoma, Nos, Invasive
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Granuloma, Nos
		Hemorrhage
		Metamorphosis, Fatty
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Pituitary gland		Carcinoma, Nos
		Cyst, Hemorrhagic
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Focal
		Ulcer, Perforated
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_017

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos  
Metamorphosis, Fatty

Liver  
Lung  
Mammary gland  
Ovary  
Pituitary gland

Inflammation, Chronic  
Adenocarcinoma, Nos  
Cyst, Nos

Stomach

Angiectasis  
Hyperplasia, Focal  
Acanthosis  
Inflammation, Chronic Diffuse  
Necrosis, Focal

Thyroid

Follicular-Cell Adenoma  
Follicular-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_018

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hemorrhage  
Metamorphosis, Fatty  
Pheochromocytoma

Eye

Retina

Thrombosis, Nos  
Cataract

Heart

Myocardium Nos

Degeneration, Nos  
Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Lung

Lymph node

Mammary gland

Mandibular Lymph Node

Pigmentation, Nos  
Inflammation, Chronic  
Hyperplasia, Lymphoid

Pituitary gland

Cystic Ducts  
Fibroadenoma  
Galactocele

Stomach

Unspecified

Fundus

Multiple Organs Nos

Cyst, Hemorrhagic  
Hyperplasia, Diffuse  
Hyperplasia, Focal  
Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_019

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Renal Lymph Node	Hyperplasia, Reticulum Cell
	Renal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Pituitary gland		Angiectasis
		Cyst, Hemorrhagic
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
		Follicular-Cell Adenoma
Unspecified	Abdominal Cavity	Necrosis, Fat
Uterus		Papillary Cystadenocarcinoma Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_020

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Bone marrow		Hypoplasia, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver		Metamorphosis, Fatty
Lung		Hyperplasia, Alveolar Epithelium Inflammation, Chronic Inflammation, Interstitial
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Spleen	Follicles	Atrophy, Nos Hemosiderosis
Stomach		Acanthosis Hyperkeratosis Inflammation, Chronic Diffuse Necrosis, Focal Ulcer, Perforated
Thyroid		Cyst, Follicular Nos
Uterus	Endometrium	Hyperplasia, Papillary
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_021

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
		Pigmentation, Nos
Liver		Focal Cellular Change
		Leukemia, Monocytic
Lung		Alveolar/Bronchiolar Carcinoma
		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
Ovary		Cyst, Nos
Pancreas	Islets	Islet-Cell Carcinoma
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hemosiderosis
Stomach	Fundus	Hyperplasia, Focal
		Inflammation, Chronic Focal
		Necrosis, Fibrinoid
		Necrosis, Focal
Zymbal gland		Cystic Ducts
		Hyperkeratosis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_022

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma Galactocele Papillary Cystadenoma, Nos
Pancreas		Ectopia
Pituitary gland		Adenoma, Nos
Spleen		Hemorrhage
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_023

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Brain	Cerebrum	Astrocytoma
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Pancreatic Lymph Node	Pigmentation, Nos
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
		Hemosiderosis
Thyroid		Cyst, Follicular Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_024

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Lung  
Lymph node  
Mammary gland  
Pituitary gland  
Spleen  
Stomach

Tubule  
Mesenteric Lymph Node

Pigmentation, Nos  
Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Fibroadenoma  
Adenoma, Nos  
Hematopoiesis  
Acanthosis  
Inflammation, Chronic Diffuse  
Necrosis, Focal  
Hyperplasia, C Cell  
Carcinoma, Nos  
Hemorrhage

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_025

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebrum	Hydrocephalus, Nos
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
Liver		Metamorphosis, Fatty
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
		Inflammation, Interstitial
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
		Galactocele
		Hyperplasia, Diffuse
Ovary		Granulosa-Cell Tumor
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Ulcer, Perforated
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_026

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
Heart	Myocardium Nos	Inflammation, Chronic Focal
Liver		Metamorphosis, Fatty
Lung		Hemorrhage
		Necrosis, Diffuse
Lymph node	Cervical Lymph Node Nos	Hemorrhage
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
Salivary gland	Parotid Gland Nos	Fibrosarcoma
Spleen		Fibrosis, Focal
		Hematopoiesis
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Fibrosarcoma, Invasive
	Multiple Organs Nos	Fibrosarcoma, Metastatic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_027

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Granuloma, Nos Necrosis, Focal Pigmentation, Nos
Lung		Inflammation, Chronic Pigmentation, Nos
Lymph node	Ileocolic Lymph Node	Lymphangiectasis
Mammary gland	Mesenteric Lymph Node	Lymphangiectasis Cystic Ducts Fibroadenoma Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
	Abdominal Cavity	Necrosis, Fat

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_028

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
		Inflammation, Interstitial
Mammary gland		Fibroadenoma
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Endometrium	Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_029

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Small	Ileum, Ileum	Leiomyoma
Kidney		Inflammation, Chronic
		Metamorphosis, Fatty
Mammary gland		Cystic Ducts
Preputial gland		Cystic Ducts
		Squamous Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_030

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty Necrosis, Focal
Lung		Adenocarcinoma, Nos, Metastatic Hyperplasia, Alveolar Epithelium Inflammation, Chronic
Spleen		Hematopoiesis
Unspecified	Multiple Organs Nos	Adenocarcinoma, Nos, Invasive
	Adipose Tissue	Hemorrhage
	Multiple Organs Nos	Leukemia, Monocytic
	Abdominal Cavity	Necrosis, Fat
Uterus		Adenocarcinoma, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_031

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_914

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change Pigmentation, Nos
Liver		Inflammation, Chronic
Lung		Hemorrhage
Lymph node	Mediastinal Lymph Node	Hyperplasia, Lymphoid
	Mandibular Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Fibroadenoma
Mammary gland		Hematopoiesis
Spleen		C-Cell Adenoma
Thyroid		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_915

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
	Sternum	Osteopetrosis
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
	Atrium	Thrombosis, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hematopoiesis
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Mammary gland		Abscess, Nos
		Adenocarcinoma, Nos
		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_916

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Terminal Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Eye	Retina	Cataract Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Hyperplasia, Tubular Cell Inflammation, Chronic Mineralization
Liver		Angiectasis Focal Cellular Change Granuloma, Nos Inflammation, Chronic
Lung		Lymphangiectasis
Lymph node	Ileocolic Lymph Node Mesenteric Lymph Node	Lymphangiectasis Lymphangiectasis
Mammary gland		Cystic Ducts Fibroadenoma Galactocele Hyperplasia, Diffuse
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Metamorphosis, Fatty

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_917

**TRT#:** 1  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos Necrosis, Focal
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos Cystic Ducts Fibroadenoma
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos Angiectasis
Salivary gland		Cystic Ducts
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_918

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Heart	Cortex Nos	Metamorphosis, Fatty
Kidney	Myocardium Nos	Inflammation, Chronic Diffuse Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Hepatitis, Toxic Inflammation, Chronic
Lung	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Lymph node		Fibroadenoma
Mammary gland		Galactocele
Pituitary gland		Adenoma, Nos Angiectasis Cyst, Hemorrhagic
Spleen		Fibrosis, Focal
Stomach		Inflammation, Chronic Focal Necrosis, Focal
Thyroid		C-Cell Carcinoma Follicular-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Cervix Uteri	Endometrial Stromal Polyp Fibrosis, Diffuse

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_919

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Colon	Inflammation, Chronic Focal
Kidney		Fibrosis, Diffuse
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Leukemia, Monocytic
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mandibular Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Ileocolic Lymph Node	Lymphangiectasis
Mammary gland		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_920

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver		Metamorphosis, Fatty
Lung		Congestion, Nos Inflammation, Chronic
Ovary		Atrophy, Nos Pigmentation, Nos
Skin	Eyelid Nos	Fibrosis, Focal
Thymus		Congestion, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_921

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Uterus		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_922

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Brain	Cerebellum Nos	Hemorrhage
	Cerebrum	Hemorrhage
Kidney		Inflammation, Chronic
		Mineralization
Liver		Hepatitis, Toxic
Lung		Fibrosis, Diffuse
	Alveoli	Histiocytosis
		Inflammation, Interstitial
Mammary gland		Adenocarcinoma, Nos
Spinal cord		Hemorrhage
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_923

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
		Hepatitis, Toxic
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Ovary		Papillary Cystadenocarcinoma Nos
Pituitary gland		Carcinoma, Nos
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_924

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Esophagus

Hyperkeratosis

Liver

Focal Cellular Change

Metamorphosis, Fatty

Necrosis, Focal

Pigmentation, Nos

Mammary gland

Cystic Ducts

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Angiectasis

Spleen

Hematopoiesis

Leiomyosarcoma, Invasive

Stomach

Acanthosis

Hyperkeratosis

Mineralization

Thyroid

Ulcer, Perforated

Unspecified

Multiple Organs Nos

C-Cell Carcinoma

Uterus

Inflammation, Chronic

Endometrial Stromal Polyp

Leiomyosarcoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_925

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland  
Bone  
Kidney

Cortex Nos  
Mandible

Metamorphosis, Fatty  
Squamous Cell Carcinoma, Invasive  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Lymph node  
Mammary gland

Tubule

Pigmentation, Nos  
Metamorphosis, Fatty  
Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Fibroadenoma  
Galactocele

Oral mucosa  
Salivary gland  
Spleen  
Stomach

Mesenteric Lymph Node

Squamous Cell Carcinoma  
Atrophy, Nos  
Hemosiderosis  
Acanthosis  
Hyperkeratosis  
Inflammation, Chronic Diffuse

Thyroid  
Unspecified

Parotid Gland Nos

Ulcer, Perforated  
C-Cell Adenoma  
Squamous Cell Carcinoma, Invasive

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_926

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Small	Mesentery Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Lymph node	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Hyperplasia, Focal
		Inflammation, Chronic Focal
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis
		Inflammation, Chronic Diffuse
		Ulcer, Perforated
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_927

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla Cortex Nos	Hemorrhage Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos Atrium	Inflammation, Chronic Diffuse Thrombosis, Nos
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Hemorrhage
Lung	Alveoli	Histiocytosis Inflammation, Chronic Inflammation, Interstitial Pigmentation, Nos
Mammary gland		Cystic Ducts
Ovary		Cyst, Nos
Pancreas	Islets	Islet-Cell Carcinoma
Pituitary gland		Angiectasis
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Uterus		Endometrial Stromal Polyp Inflammation, Chronic Diffuse

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_928

**TRT#:** 1  
**DOSE:** 0

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Intestine Large  
Kidney

Cortex Nos  
Myocardium Nos  
Colon

Metamorphosis, Fatty  
Inflammation, Chronic Diffuse  
Parasitism  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Mammary gland

Tubule

Pigmentation, Nos  
Necrosis, Focal  
Inflammation, Chronic  
Adenoma, Nos  
Cystic Ducts  
Fibroadenoma

Skin  
Spleen

Axilla  
Follicles

Fibroma  
Atrophy, Nos  
Fibrosis, Focal  
Hemosiderosis  
C-Cell Carcinoma

Thyroid

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_929

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Bone	Skull	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos Fibroadenoma
Pituitary gland		Cyst, Nos
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_930

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Atrophy, Nos
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Hematopoiesis
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Urinary bladder		Hyperplasia, Diffuse Inflammation, Chronic Diffuse

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_931

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Cecum, Colon	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Pancreas		Atrophy, Diffuse
Pituitary gland		Angiectasis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Urinary bladder		Inflammation, Chronic Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_932

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Small  
Kidney

Duodenum

Leiomyosarcoma  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change

Lung

Lymph node

Bile Duct

Inflammation, Chronic  
Metamorphosis, Fatty

Mammary gland

Mediastinal Lymph Node

Inflammation, Chronic

Mesenteric Lymph Node

Hemorrhage  
Hyperplasia, Reticulum Cell

Mediastinal Lymph Node

Pigmentation, Nos

Spleen

Thyroid

Adenocarcinoma, Nos

Cystic Ducts

Hematopoiesis

C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_933

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Necrosis, Focal
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Spleen		Hematopoiesis
Thyroid		C-Cell Adenoma
		Cystic Follicles
Uterus		Hemangiosarcoma Hemorrhage
		Hyperplasia, Papillary
Zymbal gland		Keratoacanthoma

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_934

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Metamorphosis, Fatty Neoplastic Nodule Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cystic Ducts
Pituitary gland		Adenoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_935

**TRT#:** 1  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Bone	Cortex Nos Skull Sternum	Metamorphosis, Fatty Osteopetrosis Osteopetrosis
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Granuloma, Nos Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node Mesenteric Lymph Node Mesenteric Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Hyperplasia, Focal
Skin	Head	Abscess, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_936

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas	Islets	Islet-Cell Adenoma
Stomach		Acanthosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Inflammation, Acute

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_937

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Thrombosis, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_938

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Inflammation, Chronic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Uterus		Papillary Adenocarcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_940

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebrum	Carcinoma, Nos, Invasive
	Cerebrum	Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Renal Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Carcinoma, Nos
Skin		Hyperkeratosis
Spleen		Hematopoiesis
Thyroid		Follicular-Cell Carcinoma
Unspecified	Abdominal Cavity	Necrosis, Fat

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_941

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
	Medulla	Hyperplasia, Focal
Bone	Sternum	Osteopetrosis
	Maxilla	Squamous Cell Carcinoma, Invasive
Brain	Cerebellum Nos	Hemorrhage
Esophagus		Hyperkeratosis
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Oral mucosa	Palate Nos	Squamous Cell Carcinoma, Invasive
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Unspecified		Abscess, Nos
Zymbal gland		Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_942

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Mammary gland  
Stomach

Hepatitis, Toxic  
Inflammation, Chronic  
Cystic Ducts

Unspecified

Multiple Organs Nos

Inflammation, Chronic Diffuse  
Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_943

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Lung

Lymph node

Mandibular Lymph Node

Inflammation, Chronic

Pituitary gland

Pancreatic Lymph Node

Hyperplasia, Lymphoid  
Hyperplasia, Reticulum Cell  
Adenoma, Nos

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_944

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_945

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large

Colon

Inflammation, Acute Focal

Colon

Inflammation, Chronic Diffuse

Colon

Necrosis, Focal

Kidney

Inflammation, Chronic

Papilla

Necrosis, Focal

Liver

Granuloma, Nos

Mammary gland

Cystic Ducts

Pituitary gland

Cyst, Nos

Spleen

Hemosiderosis

Unspecified

Back

Fibrosarcoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_946

**TRT#:** 1

**DOSE:** 0

**SEX:** Female

**DISP:** Moribund Sacrifice

**DAY ON TEST:**

**HISTO:**

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**OBSERVATIONS**

Kidney

Inflammation, Chronic

Mineralization

Liver

Granuloma, Nos

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Fibroadenoma

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_947

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Lung

Inflammation, Chronic

Lymph node

Hyperplasia, Reticulum Cell

Mammary gland

Cystic Ducts

Preputial gland

Squamous Cell Carcinoma

Spleen

Hematopoiesis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_948

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla  
Cortex Nos

Cortical Adenoma  
Hyperplasia, Focal  
Metamorphosis, Fatty

Bone marrow

Eye

Retina

Hypoplasia, Nos  
Degeneration, Nos

Heart

Cornea

Inflammation, Chronic Diffuse

Kidney

Myocardium Nos

Inflammation, Chronic Diffuse

Cortex

Cyst, Nos  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos

Lung

Alveoli

Necrosis, Focal  
Histiocytosis  
Inflammation, Chronic  
Inflammation, Interstitial

Mammary gland

Fibroadenoma  
Hyperplasia, Diffuse

Parathyroid gland

Pituitary gland

Spleen

Stomach

Hyperplasia, Nos  
Angiectasis

Fibrosis, Focal

Mineralization

Unspecified

Multiple Organs Nos

Necrosis, Focal

Uterus

Cervix Uteri

Leukemia, Monocytic

Fibrosis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_949

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Metamorphosis, Fatty

Eye

Retina

Pheochromocytoma

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lung

Inflammation, Chronic

Mammary gland

Adenocarcinoma, Nos

Fibroadenoma

Thyroid

Follicular-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Myelomonocytic

Back

Neurofibroma

---

**PRIMARY CAUSE OF DEATH**

-

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Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_950

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Bone	Sternum	Fibrosis, Myelo
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change
Lung		Hemorrhage Inflammation, Chronic
Mammary gland		Fibroadenoma Galactocele Hyperplasia, Diffuse
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Stomach		Mineralization Necrosis, Focal
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_951

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Kidney

Medulla

Hyperplasia, Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Necrosis, Focal

Lung

Lymph node

Mammary gland

Spleen

Unspecified

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Hyperplasia, Nos

Hematoma, Nos

Fibroma

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_952

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Bone	Skull Sternum	Osteopetrosis Osteopetrosis
Bone marrow		Hypoplasia, Nos
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Adenoma, Nos Angiectasis
Spleen		Hemosiderosis
Stomach		Acanthosis Hyperkeratosis Inflammation, Chronic Focal
Zymbal gland		Ulcer, Perforated Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_953

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Large  
Kidney

Cecum, Colon

Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Lung

Bile Duct

Hyperplasia, Nos  
Alveolar/Bronchiolar Carcinoma  
Inflammation, Chronic

Mammary gland

Skin

Spleen

Thyroid

Neck

Cystic Ducts  
Neurofibrosarcoma  
Hematopoiesis  
Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_954

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Terminal Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Hypoplasia, Nos
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney	Cortex	Cyst, Nos
		Inflammation, Chronic
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
Pancreas	Islets	Islet-Cell Carcinoma
Preputial gland		Squamous Cell Carcinoma
Spleen		Hematopoiesis
Stomach		Acanthosis
		Inflammation, Chronic Focal
		Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Back	Fibroma
	Diaphragm Nos	Hernia, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_955

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Terminal Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Atrophy, Nos
Eye	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Atrophy, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node Mediastinal Lymph Node	Lymphangiectasis Pigmentation, Nos
Mammary gland		Cystic Ducts
Pancreas	Islets	Islet-Cell Adenoma
Pituitary gland		Carcinoma, Nos
Spleen		Hematopoiesis
Stomach		Inflammation, Chronic Diffuse
Thyroid		C-Cell Carcinoma
Unspecified	Groin	Fibroma
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_956

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver  
Lung

Focal Cellular Change  
Hemorrhage  
Inflammation, Chronic

Lymph node

Mandibular Lymph Node  
Mediastinal Lymph Node  
Mesenteric Lymph Node  
Mediastinal Lymph Node

Hemorrhage  
Hemorrhage  
Hyperplasia, Reticulum Cell  
Pigmentation, Nos

Mammary gland

Cystic Ducts  
Fibroadenoma

Pituitary gland

Adenoma, Nos  
Angiectasis

Spleen

Hematopoiesis

Zymbal gland

Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_957

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos  
Metamorphosis, Fatty  
Inflammation, Chronic

Liver  
Lung  
Lymph node  
Pituitary gland  
Stomach

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell  
Adenoma, Nos  
Acanthosis  
Hyperkeratosis  
Inflammation, Chronic Focal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_958

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Lung

Tubule

Pigmentation, Nos  
Hemorrhage  
Inflammation, Chronic

Pituitary gland

Unspecified

Uterus

Multiple Organs Nos

Adenoma, Nos  
Leukemia, Monocytic  
Hydrometra

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_959

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Fibrosis, Myelo
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Hemorrhage
		Metamorphosis, Fatty
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Renal Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Hyperplasia, Diffuse
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Stomach		Mineralization
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_960

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Lung		Congestion, Nos Granuloma, Nos Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Adenoma, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_961

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Stomach		Hyperkeratosis Inflammation, Chronic Diffuse
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Endometrium	Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_962

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Bile Duct

Inflammation, Chronic  
Leukemia, Monocytic  
Metamorphosis, Fatty  
Pigmentation, Nos

Lung

Inflammation, Chronic  
Pigmentation, Nos

Lymph node  
Mammary gland

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell  
Adenocarcinoma, Nos  
Cystic Ducts

Pituitary gland  
Preputial gland  
Spleen

Adenoma, Nos  
Squamous Cell Carcinoma  
Hematopoiesis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_963

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Hemorrhage Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Parathyroid gland		Hyperplasia, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_964

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change Granuloma, Nos Leukocytosis, Nos
Liver		Inflammation, Chronic
Lung		Hyperplasia, Reticulum Cell
Lymph node	Mesenteric Lymph Node	Cystic Ducts Hyperplasia, Diffuse
Mammary gland		Atrophy, Focal
Pancreas		Adenoma, Nos
Pituitary gland		Hemosiderosis
Spleen		Hyperplasia, C Cell
Thyroid		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_965

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Hepatitis, Toxic
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Chronic
Mammary gland		Hyperplasia, Diffuse
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Cyst, Nos
Spleen		Fibrosis, Multifocal
		Hemosiderosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Endometrium	Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_966

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Brain

Kidney

Liver

Lung

Lymph node

Spleen

Unspecified

Tubule

Mesenteric Lymph Node

Multiple Organs Nos

Pheochromocytoma

Hemorrhage

Necrosis, Focal

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Metamorphosis, Fatty

Hemorrhage

Inflammation, Chronic

Hyperplasia, Reticulum Cell

Necrosis, Focal

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_967

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Cortical Adenoma

Heart

Myocardium Nos

Metamorphosis, Fatty

Intestine Large

Cecum, Colon

Inflammation, Chronic Diffuse

Kidney

Tubule

Fibroma

Inflammation, Chronic

Mineralization

Liver

Pigmentation, Nos

Focal Cellular Change

Lung

Alveoli

Histiocytosis

Inflammation, Chronic

Mammary gland

Fibroadenoma

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Thyroid

C-Cell Carcinoma

Unspecified

Abdominal Cavity

Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_968

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Cerebellum Nos	Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Leukocytosis, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos
		Cystic Ducts
		Fibroadenoma
		Galactocele
		Hyperplasia, Diffuse
Pituitary gland		Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_969

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Blood vessel	Coronary Artery Nos	Thrombus, Organized
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Small	Jejunum	Adenomatous Polyp, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Lymphangiectasis
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_970

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland  
Bone marrow  
Eye

Retina

Cornea

Myocardium Nos

Mesentery Nos

Heart  
Intestine Small  
Kidney

Tubule

Liver

Lung  
Lymph node

Mandibular Lymph Node

Mediastinal Lymph Node

Mammary gland  
Pancreas  
Parathyroid gland  
Pituitary gland

Spleen  
Thyroid

Pheochromocytoma  
Hyperplasia, Nos  
Cataract  
Degeneration, Nos  
Inflammation, Chronic Focal  
Inflammation, Chronic Diffuse  
Periarteritis  
Inflammation, Chronic  
Mineralization  
Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos  
Inflammation, Chronic  
Hyperplasia, Lymphoid  
Hyperplasia, Lymphoid  
Adenocarcinoma, Nos  
Fibrosarcoma  
Hyperplasia, Nos  
Adenoma, Nos  
Angiectasis  
Hematopoiesis  
C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_971

**TRT#:** 1

**DOSE:** 0

**SEX:** Female

**DISP:** Moribund Sacrifice

**DAY ON TEST:**

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Mammary gland

Pituitary gland

Spleen

Myocardium Nos

Pheochromocytoma

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Focal Cellular Change

Granuloma, Nos

Inflammation, Chronic

Cystic Ducts

Adenoma, Nos

Hemosiderosis

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PRIMARY CAUSE OF DEATH

-

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**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_972

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Brain	Cerebellum Nos	Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Granuloma, Nos
		Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos
Ovary		Granulosa-Cell Tumor
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		Cyst, Follicular Nos
Uterus	Cervix Uteri	Fibrosis, Diffuse

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_973

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Mesentery Nos, Colon	Inflammation, Chronic Focal
	Cecum, Colon	Parasitism
Intestine Small	Duodenum	Necrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Inflammation, Chronic
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hemorrhage
	Mediastinal Lymph Node	Pigmentation, Nos
Pancreas	Islets	Islet-Cell Adenoma
Pituitary gland		Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_974

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Lung

Pituitary gland

Spleen

Unspecified

Myocardium Nos

Tubule

Multiple Organs Nos

Pheochromocytoma

Inflammation, Chronic Focal

Inflammation, Chronic

Pigmentation, Nos

Hepatitis, Toxic

Inflammation, Chronic

Angiectasis

Hyperplasia, Focal

Fibrosis, Focal

Leukemia, Monocytic

---

PRIMARY CAUSE OF DEATH

-

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Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_975

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Cerebellum Nos	Hemorrhage
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Necrosis, Focal
Lung		Alveolar/Bronchiolar Carcinoma
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_976

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
Liver		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 1\_977

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos  
Focal Cellular Change

Liver

Inflammation, Chronic

Lung

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Pituitary gland

Angiectasis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_978

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Accidentally Killed

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Medulla

Cortical Adenoma

Kidney

Hyperplasia, Focal

Liver

Inflammation, Chronic

Lung

Mineralization

Focal Cellular Change

Congestion, Nos

Hemorrhage

Lymph node

Mesenteric Lymph Node

Inflammation, Chronic

Spleen

Hyperplasia, Reticulum Cell

Hematopoiesis

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_979

TRT#: 1  
DOSE: 0

SEX: Female  
DISP: Moribund Sacrifice

DAY ON TEST:  
HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Bone marrow		Hypoplasia, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
	Atrium	Thrombosis, Nos
Intestine Large	Cecum, Colon	Inflammation, Acute Focal
	Cecum, Colon	Inflammation, Chronic Diffuse
	Cecum, Colon	Necrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Hepatitis, Toxic
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Spleen		Fibrosis, Diffuse
		Hemosiderosis
Stomach		Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Mediastinum Nos	Edema, Nos
	Mediastinum Nos	Inflammation, Chronic
	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_980

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Congestion, Nos Hyperplasia, Focal Pheochromocytoma
Eye	Retina Cornea Atrium	Cataract Degeneration, Nos Inflammation, Chronic Focal Thrombosis, Nos
Heart		Mineralization
Kidney		Focal Cellular Change
Liver		Granuloma, Nos Necrosis, Focal
Lung	Alveoli	Histiocytosis
Lymph node	Mediastinal Lymph Node Mandibular Lymph Node Mediastinal Lymph Node	Erythrophagocytosis Hyperplasia, Lymphoid Hyperplasia, Nos
Mammary gland		Adenocarcinoma, Nos Fibroadenoma Galactocele
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos Angiectasis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Inflammation, Chronic
Uterus	Endometrium	Cyst, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_981

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Hypoplasia, Nos
Eye		Cataract
	Retina	Degeneration, Nos
		Hemorrhage
Heart	Cornea	Inflammation, Chronic Focal
Kidney	Myocardium Nos	Inflammation, Chronic Diffuse
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hepatitis, Toxic
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Stomach		Hyperkeratosis
		Inflammation, Chronic Diffuse
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Urinary bladder		Hyperplasia, Diffuse
Uterus	Endometrium	Cyst, Nos
		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_982

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Degeneration, Nos
		Focal Cellular Change
		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
Ovary		Hyperplasia, Focal
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
		Cyst, Hemorrhagic
Stomach		Acanthosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Endometrium	Cyst, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_983

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
Liver		Metamorphosis, Fatty
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Lymphangiectasis
	Mediastinal Lymph Node	Pigmentation, Nos
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Focal
		Ulcer, Perforated
Uterus	Endometrial Gland	Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_984

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Bone	Vertebra	Osteosarcoma
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Granuloma, Nos Leukemia, Monocytic Pigmentation, Nos
Lung		Congestion, Nos Hemorrhage Osteosarcoma, Metastatic
Skin	Foot And Toe Nos	Inflammation, Chronic Focal
Spleen		Hemosiderosis
Urinary bladder		Congestion, Nos Hyperplasia, Epithelial
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_985

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Hepatitis, Toxic
Lymph node	Mediastinal Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Pituitary gland		Adenoma, Nos Cyst, Hemorrhagic
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_986

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
		Angiectasis
Stomach		Embryonal Rest
Thyroid		C-Cell Carcinoma
Tongue		Acanthosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_987

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Bone

Skull

Osteopetrosis

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Liver

Hepatitis, Toxic

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Galactocele

Pituitary gland

Angiectasis

Stomach

Abscess, Nos

Acanthosis

Inflammation, Chronic Diffuse

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_988

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Spleen		Hematopoiesis
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_989

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Kidney		Synechia, Posterior
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Leukocytosis, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
		Hyperplasia, Focal
Thyroid		C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_990

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Eye

Heart

Kidney

Liver

Lung

Lymph node

Mammary gland

Thyroid

Unspecified

Retina

Myocardium Nos

Tubule

Mesenteric Lymph Node

Cervical Lymph Node Nos

Abdominal Cavity

Pheochromocytoma

Cataract

Degeneration, Nos

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Inflammation, Chronic

Hyperplasia, Reticulum Cell

Lymphoma, Lymphocytic-Malignant Type

Fibroadenoma

Hyperplasia, C Cell

Necrosis, Fat

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_991

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
		Hemorrhage
Heart		Synechia, Posterior
Kidney	Myocardium Nos	Inflammation, Chronic Focal
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
		Angiectasis
		Hyperplasia, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 1\_992

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
		Pigmentation, Nos
Liver		Neoplastic Nodule
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas		Ectopia
Pituitary gland		Hyperplasia, Focal
Stomach		Acanthosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_993

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Hematopoiesis

Lung  
Lymph node

Mandibular Lymph Node  
Mesenteric Lymph Node  
Mediastinal Lymph Node

Inflammation, Chronic  
Hyperplasia, Lymphoid  
Hyperplasia, Reticulum Cell  
Pigmentation, Nos

Mammary gland

Cystic Ducts  
Fibroadenoma

Pituitary gland

Angiectasis  
Hyperplasia, Focal

Preputial gland

Squamous Cell Carcinoma

Spleen  
Thyroid

Hematopoiesis  
Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_994

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Bone

Cortex Nos

Hyperplasia, Focal

Heart

Sternum

Metamorphosis, Fatty

Intestine Large

Myocardium Nos

Fibrosis, Myelo

Kidney

Colon

Inflammation, Chronic Diffuse

Liver

Parasitism

Inflammation, Chronic

Lung

Mineralization

Degeneration, Nos

Lymph node

Pancreatic Lymph Node

Focal Cellular Change

Mammary gland

Pancreatic Lymph Node

Inflammation, Chronic

Ovary

Hyperplasia, Reticulum Cell

Pancreas

Pigmentation, Nos

Pituitary gland

Adenocarcinoma, Nos

Cystic Ducts

Thymus

Fibroadenoma

Granulosa-Cell Tumor

Thyroid

Atrophy, Diffuse

Adenoma, Nos

Unspecified

Multiple Organs Nos

Cyst, Hemorrhagic

Ectopia

C-Cell Carcinoma

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_995

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone	Sternum	Osteopetrosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Cyst, Nos
		Focal Cellular Change
	Bile Duct	Inflammation, Chronic
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Pancreas	Acinus	Hyperplasia, Focal
	Islets	Islet-Cell Adenoma
Preputial gland		Squamous Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Hydrometra

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_996

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Metamorphosis, Fatty

Necrosis, Focal

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Spleen

Hemorrhage

Thyroid

C-Cell Adenoma

Unspecified

Hip

Fibroma

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_997

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma, Malignant
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
Lung		C-Cell Carcinoma, Metastatic Inflammation, Chronic
Lymph node	Mandibular Lymph Node	C-Cell Carcinoma, Metastatic
	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Pancreas	Acinus	Hyperplasia, Focal
Pituitary gland		Hyperplasia, Focal
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 1\_998

**TRT#:** 1  
**DOSE:** 0

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebrum	Gliosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Hepatitis, Toxic
		Necrosis, Focal
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mediastinal Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Spleen		Hemorrhage
		Thrombosis, Nos
Stomach		Inflammation, Chronic Focal
		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp
	Cervix Uteri	Fibrosis
Vagina		Squamous Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_999

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Cortex Nos

Metamorphosis, Fatty

Necrosis, Focal

Bone

Skull

Osteopetrosis

Eye

Retina

Degeneration, Nos

Kidney

Inflammation, Chronic

Mineralization

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Pigmentation, Nos

Mammary gland

Cystic Ducts

Fibroadenoma

Pancreas

Atrophy, Diffuse

Pituitary gland

Angiectasis

Hyperplasia, Focal

Stomach

Hyperkeratosis

Unspecified

Multiple Organs Nos

Leukemia, Myelomonocytic

Abdominal Cavity

Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_282

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Esophagus		Follicular-Cell Carcinoma, Invasive
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Follicular-Cell Carcinoma, Metastatic
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Pituitary gland		Angiectasis
Thyroid		Follicular-Cell Carcinoma
Trachea		Follicular-Cell Carcinoma, Invasive
Unspecified	Diaphragm Nos	Hernia, Nos
	Abdominal Cavity	Necrosis, Fat
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_283

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Kidney

Liver

Lung

Thyroid

Unspecified

Multiple Organs Nos

Pheochromocytoma

Inflammation, Chronic

Mineralization

Hepatitis, Toxic

Hemorrhage

Inflammation, Chronic

Hyperplasia, C Cell

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_284

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Small

Ileum, Ileum

Inflammation, Chronic Focal

Kidney

Mineralization

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Lymphoid

Oral mucosa

Inflammation, Chronic Focal

Necrosis, Focal

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_285

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye		Cataract
	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_286

**TRT#:** 2  
**DOSE:** 10000 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
		Thrombosis, Nos
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Hematopoiesis
		Inflammation, Chronic
		Mineralization
Liver		Granuloma, Nos
		Leukocytosis, Nos
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
		Hemosiderosis
Thyroid		Hyperplasia, C Cell
Urinary bladder		Hyperplasia, Epithelial
Uterus		Abscess, Nos
		Hydrometra

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_287

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Atrophy, Nos
	Harderian Gland	Inflammation, Chronic
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Hyperplasia, Alveolar Epithelium
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Spleen		Hematopoiesis
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Uterus	Endometrium	Cyst, Nos
		Endometrial Stromal Sarcoma
	Endometrium	Hyperplasia, Papillary

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_288

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Bone

Eye

Kidney

Liver

Pituitary gland

Spleen

Stomach

Thyroid

Unspecified

Cortex Nos

Sternum

Retina

Tubule

Multiple Organs Nos

Abdominal Cavity

Infarct, Nos

Metamorphosis, Fatty

Osteopetrosis

Cataract

Degeneration, Nos

Hemorrhage

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Adenoma, Nos

Necrosis, Focal

Acanthosis

Hyperkeratosis

Necrosis, Focal

Ulcer, Perforated

Hyperplasia, C Cell

Leukemia, Myelomonocytic

Necrosis, Fat

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_289

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebellum Nos	Hemorrhage
Esophagus		Follicular-Cell Carcinoma, Invasive
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Cecum, Colon	Hemorrhage
	Cecum, Colon	Necrosis, Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Lung		Inflammation, Chronic
Lymph node	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Pigmentation, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Stomach		Inflammation, Chronic Focal
		Necrosis, Focal
Thyroid		Follicular-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_290

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Pigmentation, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Cyst, Hemorrhagic
		Hematopoiesis
Stomach		Hemosiderosis
		Acanthosis
Thyroid		Mineralization
Uterus		Cyst, Follicular Nos
		Endometrial Stromal Polyp
		Hydrometra

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_291

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hypertrophy, Focal Pheochromocytoma
Bone	Vertebra	Osteosarcoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung	Alveoli	Histiocytosis Hyperplasia, Alveolar Epithelium Inflammation, Chronic
		Osteosarcoma, Metastatic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Pituitary gland		Angiectasis Hyperplasia, Focal
Spinal cord		Osteosarcoma, Invasive
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_292

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Eye

Cortex Nos

Metamorphosis, Fatty

Heart

Retina

Cataract

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Inflammation, Chronic Focal

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Mineralization

Mammary gland

Focal Cellular Change

Parathyroid gland

Inflammation, Chronic

Thyroid

Pigmentation, Nos

Hyperplasia, Lymphoid

Cystic Ducts

Fibroadenoma

Hyperplasia, Nos

Hyperplasia, C Cell

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_293

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Preputial gland		Squamous Cell Carcinoma
Skin	Nose	Squamous Cell Papilloma
Thyroid		Follicular-Cell Carcinoma
Unspecified	Multiple Organs Nos	Inflammation, Chronic
Zymbal gland		Carcinoma In Situ, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_294

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
		Galactocele
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Carcinoma, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_295

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Cecum, Colon	Parasitism
	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Hemorrhage
		Necrosis, Focal
		Neoplastic Nodule
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Ovary		Cyst, Parovarian
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_296

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Sternum	Osteopetrosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Mammary gland		Cystic Ducts
		Fibroadenoma
Stomach		Acanthosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_297

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_298

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Bone

Eye

Heart

Kidney

Liver

Mammary gland

Pancreas

Thyroid

Unspecified

Skull

Sternum

Retina

Cornea

Myocardium Nos

Tubule

Multiple Organs Nos

Cortical Adenoma

Osteopetrosis

Osteopetrosis

Cataract

Degeneration, Nos

Inflammation, Chronic Focal

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Cystic Ducts

Fibroadenoma

Galactocele

Atrophy, Focal

Hyperplasia, C Cell

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_299

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Uterus	Endometrium	Hyperplasia, Nos
	Endometrium	Papillary Adenocarcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_300

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Stomach		Acanthosis
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_301

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Spleen

Stomach

Thyroid

Unspecified

Mandibular Lymph Node

Mediastinal Lymph Node

Mediastinal Lymph Node

Multiple Organs Nos

Multiple Organs Nos

Multiple Organs Nos

Chest

Multiple Organs Nos

Mineralization

Degeneration, Nos

Focal Cellular Change

Hematopoiesis

Mitotic Alteration

Inflammation, Interstitial

Hyperplasia, Lymphoid

Hyperplasia, Lymphoid

Neurofibrosarcoma, Metastatic

Cystic Ducts

Fibroadenoma

Galactocele

Hyperplasia, Nos

Hyperplasia, Reticulum Cell

Adenoma, Nos

Hematopoiesis

Acanthosis

Hyperkeratosis

Cyst, Follicular Nos

Erythrophagocytosis

Inflammation, Chronic

Metamorphosis, Fatty

Neurofibrosarcoma

Pigmentation, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_302

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver		Hepatitis, Toxic Pigmentation, Nos
Lung		Inflammation, Chronic
Pancreas		Ectopia
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Hydrometra

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_303

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
Lung	Alveoli	Histiocytosis Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts Fibroadenoma
Pancreas		Atrophy, Focal
Preputial gland		Squamous Cell Carcinoma
Thyroid		Follicular-Cell Carcinoma
Uterus		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_304

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos Pigmentation, Nos
Lung		Inflammation, Chronic Inflammation, Interstitial
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma
Pituitary gland		Hyperplasia, Focal
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_305

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla Cortex Nos	Hyperplasia, Focal Hyperplasia, Focal Metamorphosis, Fatty
Blood vessel	Mesenteric Artery Nos	Inflammation, Chronic
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Metamorphosis, Fatty Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node Mesenteric Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos Cystic Ducts Fibroadenoma Galactocele Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis Inflammation, Chronic Diffuse
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_306

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Hyperplasia, Focal  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Pituitary gland

Focal Cellular Change  
Inflammation, Chronic  
Angiectasis

Skin

Back

Hyperplasia, Focal  
Inflammation, Chronic Focal

Thyroid  
Unspecified

Back

Necrosis, Focal

Uterus

Multiple Organs Nos

Hyperplasia, C Cell  
Leukemia, Monocytic  
Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_307

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Angiectasis

Heart

Myocardium Nos

Hyperplasia, Focal

Kidney

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Liver

Tubule

Pigmentation, Nos

Focal Cellular Change

Hepatitis, Toxic

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Cystic Ducts

Pancreas

Ectopia

Pituitary gland

Adenoma, Nos

Thyroid

Angiectasis

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_308

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Small  
Kidney

Duodenum

Fibroma  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos  
Metamorphosis, Fatty  
Pigmentation, Nos

Lung  
Lymph node

Mesenteric Lymph Node  
Mediastinal Lymph Node  
Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Pigmentation, Nos  
Pigmentation, Nos

Spleen

Fibrosis, Focal  
Hematopoiesis

Stomach

Inflammation, Chronic Focal  
Necrosis, Focal

Thyroid

C-Cell Carcinoma

Tongue

Hyperkeratosis

Uterus

Hemorrhage  
Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_309

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Ovary		Degeneration, Hyaline
Pituitary gland		Carcinoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
		Inflammation, Chronic Focal
		Necrosis, Focal
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_310

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Medulla  
Cortex Nos

Cortical Adenoma  
Hyperplasia, Focal  
Metamorphosis, Fatty  
Pheochromocytoma

Eye  
Heart  
Kidney

Retina  
Myocardium Nos

Degeneration, Nos  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Mammary gland  
Pituitary gland  
Thyroid

Tubule

Pigmentation, Nos  
Pigmentation, Nos  
Inflammation, Chronic  
Cystic Ducts

Unspecified  
Urinary bladder

Multiple Organs Nos

Hyperplasia, Focal  
C-Cell Carcinoma  
Follicular-Cell Adenoma  
Leukemia, Monocytic  
Transitional-Cell Papilloma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_311

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Hyperplasia, Nos
Eye	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Colon	Hemorrhage
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
		Neoplastic Nodule
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Unspecified		Fibroma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_312

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Hepatitis, Toxic Pigmentation, Nos
Liver		Inflammation, Chronic Hyperplasia, Nos
Lung		Fibrosis, Focal
Parathyroid gland		Hyperplasia, C Cell
Spleen		Leukemia, Monocytic
Thyroid		Endometrial Stromal Polyp
Unspecified	Multiple Organs Nos	
Uterus		

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_313

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
		Hyperplasia, Alveolar Epithelium
		Inflammation, Interstitial
		Papillary Carcinoma, Metastatic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
		Galactocele
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Cervix Uteri	Acanthosis
	Cervix Uteri	Hyperkeratosis
		Papillary Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_314

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Bone marrow

Heart

Kidney

Myocardium Nos

Tubule

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Spleen

Stomach

Mesenteric Lymph Node

Hypoplasia, Nos

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Granuloma, Nos

Inflammation, Chronic

Hyperplasia, Lymphoid

Cystic Ducts

Adenoma, Nos

Hemosiderosis

Acanthosis

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_315

**TRT#:** 2  
**DOSE:** 10000 PPM

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
Eye	Retina	Degeneration, Nos
Kidney		Hyperplasia, Tubular Cell Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Metamorphosis, Fatty
Lung		Adenocarcinoma, Nos, Metastatic Congestion, Nos Inflammation, Chronic
Lymph node	Mediastinal Lymph Node Mediastinal Lymph Node Mesenteric Lymph Node	Congestion, Nos Hyperplasia, Reticulum Cell Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos Cystic Ducts
Pituitary gland		Adenoma, Nos Angiectasis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_316

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Cortical Adenoma

Bone

Cortex Nos

Hyperplasia, Focal

Heart

Sternum

Metamorphosis, Fatty

Kidney

Myocardium Nos

Osteopetrosis

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Cystic Ducts

Fibroadenoma

Galactocele

Pancreas

Islets

Islet-Cell Adenoma

Pituitary gland

Angiectasis

Cyst, Nos

Preputial gland

Cystic Ducts

Spleen

Hematopoiesis

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Zymbal gland

Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_317

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hepatitis, Toxic
		Neoplastic Nodule
Lung		Inflammation, Chronic
		Pigmentation, Nos
Mammary gland		Fibroadenoma
		Hyperplasia, Nos
Pancreas	Islets	Islet-Cell Carcinoma
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_318

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
		Necrosis, Focal
Lung		Granuloma, Nos
		Hemorrhage
		Inflammation, Chronic
Lymph node	Ileocolic Lymph Node	Hyperplasia, Lymphoid
	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Ileocolic Lymph Node	Lymphangiectasis
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
		Cyst, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_319

**TRT#:** 2  
**DOSE:** 10000 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Hemorrhage
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Ovary		Cyst, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Uterus		Papillary Adenocarcinoma

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_320

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Cecum, Colon	Necrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
		Angiectasis
Thyroid		Cyst, Follicular Nos
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_321

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Heart

Liver

Myocardium Nos

Bile Duct

Lung

Lymph node

Mesenteric Lymph Node

Mesenteric Lymph Node

Mammary gland

Pancreas

Pituitary gland

Spleen

Thyroid

Zymbal gland

Pheochromocytoma

Inflammation, Chronic Diffuse

Focal Cellular Change

Granuloma, Nos

Hyperplasia, Nos

Inflammation, Chronic

Hyperplasia, Reticulum Cell

Pigmentation, Nos

Fibroadenoma

Galactocele

Fibrosis, Focal

Adenoma, Nos

Hematopoiesis

Cyst, Follicular Nos

Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_322

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Lymph node  
Pancreas

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell  
Atrophy, Focal

Thyroid

Cyst, Follicular Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_323

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_324

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_325

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
	Sternum	Osteopetrosis
Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Renal Lymph Node	Erythrophagocytosis
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Renal Lymph Node	Lymphangiectasis
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Oral mucosa		Squamous Cell Carcinoma
Pituitary gland		Carcinoma, Nos
Spleen		Hematopoiesis
		Hemosiderosis
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_326

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Descending, Colon	Adenocarcinoma In Adenomatous Polyp
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Lymphoid
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
Pituitary gland		Adenoma, Nos
Thyroid		Follicular-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_327

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Lung

Metamorphosis, Fatty  
Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

Uterus

Hydrometra

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_328

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change
Liver		Inflammation, Chronic
Lung		Fibroadenoma
Mammary gland		Galactocele
Pancreas	Acinus	Hyperplasia, Focal
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_329

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos Metamorphosis, Fatty
Lung		Hemorrhage
	Alveoli	Histiocytosis Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Pancreas		Atrophy, Focal
Skin		Acanthosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_330

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Metamorphosis, Fatty  
Necrosis, Focal

Lung  
Mammary gland

Inflammation, Chronic  
Cystic Ducts

Pituitary gland

Adenoma, Nos

Spleen

Hemosiderosis

Stomach

Acanthosis

Hyperkeratosis

Inflammation, Chronic Diffuse

Necrosis, Focal

Ulcer, Perforated

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_331

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
Pancreas		Atrophy, Focal
Preputial gland		Carcinoma, Nos
Skin	Tail	Squamous Cell Papilloma
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_332

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Cataract
		Degeneration, Nos
		Hemorrhage
	Cornea	Inflammation, Chronic Diffuse
		Synechia, Posterior
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_333

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Intestine Large  
Kidney

Cortex Nos  
Myocardium Nos  
Large Intestine, Colon

Degeneration, Nos  
Inflammation, Chronic Focal  
Parasitism  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos  
Necrosis, Focal

Lung  
Mammary gland  
Spleen  
Unspecified

Inflammation, Chronic  
Fibroadenoma  
Hematopoiesis  
Fibrosarcoma

Axilla

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_334

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Intestine Large	Cecum, Colon	Necrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
Spleen		Hemorrhage
		Thrombosis, Nos
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_335

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Inflammation, Chronic Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Pituitary gland		Adenoma, Nos
Spleen	Follicles	Atrophy, Nos Hemosiderosis
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_336

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Angiectasis
		Focal Cellular Change
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
		Inflammation, Interstitial
Mammary gland		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_337

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Intestine Large  
Kidney

Cortex Nos  
Myocardium Nos  
Cecum, Colon

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Hyperplasia, Epithelial  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Necrosis, Focal

Lung  
Lymph node  
Mammary gland

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Adenocarcinoma, Nos  
Cystic Ducts  
Fibroadenoma

Pancreas  
Pituitary gland  
Thyroid  
Unspecified  
Zymbal gland

Multiple Organs Nos

Galactocele  
Atrophy, Focal  
Adenoma, Nos  
Hyperplasia, C Cell  
Leukemia, Monocytic  
Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_338

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Small	Duodenum	Necrosis, Focal
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Galactocele
		Hyperplasia, Nos
Pancreas		Ectopia
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
	Abdominal Cavity	Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_339

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Kidney

Liver

Lung

Lymph node

Spleen

Uterus

Bile Duct

Mediastinal Lymph Node

Mineralization

Fibrosis

Inflammation, Chronic

Congestion, Nos

Hematopoiesis

Endometrial Stromal Sarcoma

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_340

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Adenoma, Nos
		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
Skin	Lip Nos	Squamous Cell Papilloma
Spleen		Fibrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_341

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
		Thrombosis, Nos
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos
		Cystic Ducts
Pituitary gland		Cyst, Hemorrhagic
Skin	Nose	Squamous Cell Papilloma
Thyroid		C-Cell Carcinoma
		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Myelomonocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_342

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Bone	Skull	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Large Intestine, Colon	Parasitism
Intestine Small	Duodenum	Diverticulum
Kidney		Inflammation, Chronic
Liver		Focal Cellular Change
	Bile Duct	Granuloma, Nos
		Hyperplasia, Nos
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Pancreas		Atrophy, Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_343

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney

Colon

Parasitism  
Mineralization

Liver  
Lung

Tubule

Pigmentation, Nos  
Hepatitis, Toxic  
Fibrosis, Diffuse

Mammary gland

Alveoli

Histiocytosis  
Histiocytosis  
Hyperplasia, Alveolar Epithelium  
Cystic Ducts  
Hyperplasia, Diffuse

Pancreas

Unspecified

Multiple Organs Nos

Ectopia  
Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_344

**TRT#:** 2  
**DOSE:** 10000 PPM

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Hemorrhage
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Thyroid		Cyst, Follicular Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_345

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Brain	Cerebrum	Glioma, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Lung		Congestion, Nos
		Hemorrhage
		Inflammation, Chronic
Pituitary gland		Cyst, Nos

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_346

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Myocardium Nos

Mandibular Lymph Node

Mesenteric Lymph Node

Degeneration, Lipoid

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Focal Cellular Change

Granuloma, Nos

Metamorphosis, Fatty

Inflammation, Chronic

Erythrophagocytosis

Hyperplasia, Reticulum Cell

Cystic Ducts

Fibroadenoma

Hyperplasia, Focal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_347

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Cataract
		Degeneration, Nos
Heart	Myocardium Nos	Synechia, Posterior
Kidney		Inflammation, Chronic Diffuse
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Hyperplasia, Focal
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991  
**Test Type:** Long-Term  
**Route:** Dosed-Feed  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite  
**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:05:34  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_348

**TRT#:** 2  
**DOSE:** 10000 PPM

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Brain	Cerebrum	Abscess, Nos
	Cerebrum	Astrocytoma
Esophagus		Hyperkeratosis
Eye		Cataract
	Anterior Chamber	Empyema
	Cornea	Inflammation, Necrotizing
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
Spleen		Hematopoiesis
Stomach		Acanthosis
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_349

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Amyloidosis

Cortex Nos

Hyperplasia, Focal

Cortex Nos

Hyperplasia, Nos

Heart

Myocardium Nos

Metamorphosis, Fatty

Kidney

Cortex

Inflammation, Chronic Focal

Cyst, Nos

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Granuloma, Nos

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Cystic Ducts

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Stomach

Acanthosis

Hyperkeratosis

Inflammation, Chronic Focal

Thyroid

Hyperplasia, C Cell

Unspecified

Abdominal Cavity

Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_350

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Celiac Lymph Node	Lymphangiectasis
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Angiectasis
Preputial gland		Squamous Cell Carcinoma
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_351

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Eye

Heart

Kidney

Retina

Myocardium Nos

Tubule

Liver

Lung

Mammary gland

Pituitary gland

Unspecified

Uterus

Multiple Organs Nos

Pheochromocytoma

Degeneration, Nos

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Inflammation, Chronic

Adenocarcinoma, Nos

Cystic Ducts

Fibroadenoma

Adenoma, Nos

Leukemia, Monocytic

Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_352

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Hepatitis, Toxic Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_353

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Myocardium Nos

Tubule

Lung

Preputial gland

Spleen

Thyroid

Unspecified

Multiple Organs Nos

Pheochromocytoma

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Inflammation, Chronic

Squamous Cell Carcinoma

Necrosis, Focal

C-Cell Carcinoma

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_354

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization  
Mixed Tumor, Malignant  
Tubular-Cell Adenocarcinoma

Liver

Angiectasis  
Hepatitis, Toxic

Lung

Inflammation, Chronic

Mammary gland

Cystic Ducts

Fibroadenoma

Hyperplasia, Nos

Parathyroid gland

Hyperplasia, Nos

Spleen

Follicles

Atrophy, Nos

Thyroid

Necrosis, Focal

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_355

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Nos Hyperplasia, Focal Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Necrosis, Focal Pigmentation, Nos Inflammation, Chronic
Lung		Hyperplasia, Lymphoid
Lymph node	Mesenteric Lymph Node Mesenteric Lymph Node Mesenteric Lymph Node	Hyperplasia, Reticulum Cell Necrosis, Focal
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Preputial gland		Squamous Cell Carcinoma
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma Cyst, Follicular Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_356

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Lymphangiectasis
Mammary gland		Cystic Ducts
		Fibroadenoma
Pancreas	Acinus	Hyperplasia, Focal
Parathyroid gland		Hyperplasia, Nos
Preputial gland		Cystic Ducts
Skin	Groin	Acanthosis
	Groin	Hyperkeratosis
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_357

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Lymph node

Tubule

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

Skin  
Thyroid  
Unspecified

Pancreatic Lymph Node  
Pancreatic Lymph Node  
Back

Pigmentation, Nos  
Keratoacanthoma  
Follicular-Cell Adenoma

Multiple Organs Nos

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_358

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Intestine Large  
Kidney

Cortex Nos  
Myocardium Nos  
Large Intestine, Colon

Hyperplasia, Focal  
Inflammation, Chronic Diffuse  
Parasitism  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Metamorphosis, Fatty  
Necrosis, Focal

Lung  
Mammary gland

Inflammation, Chronic  
Cystic Ducts  
Fibroadenoma

Pituitary gland  
Stomach

Adenoma, Nos  
Inflammation, Chronic Focal  
Necrosis, Focal

Unspecified  
Uterus

Multiple Organs Nos

Leukemia, Monocytic  
Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_359

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Esophagus		Hyperkeratosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
		Metamorphosis, Fatty
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
Salivary gland		Inflammation, Acute Focal
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_360

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Brain

Cerebrum

Astrocytoma

Eye

Retina

Degeneration, Nos

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Mammary gland

Adenoma, Nos

Cystic Ducts

Fibroadenoma

Hyperplasia, Nos

Pituitary gland

Hyperplasia, Focal

Thyroid

C-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_361

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
		Galactocele
Pancreas		Ectopia
Preputial gland		Abscess, Nos
		Cystic Ducts
		Squamous Cell Carcinoma
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Cervix Uteri	Cyst, Nos
		Hydrometra
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_362

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Hemorrhage
		Inflammation, Chronic
Mammary gland		Hyperplasia, Nos
Pancreas		Atrophy, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_363

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Eye	Cortex Nos	Metamorphosis, Fatty
Heart	Retina	Degeneration, Nos
Kidney	Myocardium Nos	Inflammation, Chronic Diffuse Inflammation, Chronic Mineralization
Lung	Tubule	Pigmentation, Nos Alveolar/Bronchiolar Adenoma Pigmentation, Nos
Lymph node	Mediastinal Lymph Node Mandibular Lymph Node Mediastinal Lymph Node	Erythrophagocytosis Hyperplasia, Lymphoid Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Hyperplasia, Nos
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos Angiectasis
Stomach		Hyperplasia, Focal Hyperplasia, Epithelial Necrosis, Focal
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_364

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Granuloma, Nos Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Spleen		Hemosiderosis
Thyroid		Hyperplasia, C Cell
Zymbal gland		Squamous Cell Carcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_365

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Lymph node  
Mammary gland  
Spleen  
Stomach

Mesenteric Lymph Node

Focal Cellular Change  
Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Cystic Ducts  
Hemosiderosis  
Acanthosis  
Hyperkeratosis  
Inflammation, Chronic Focal  
Necrosis, Focal  
Hyperplasia, C Cell

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_366

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla Cortex Nos	Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Heart Kidney	Myocardium Nos	Inflammation, Chronic Focal Inflammation, Chronic Mineralization
Liver	Tubule  Bile Duct Bile Duct	Pigmentation, Nos Focal Cellular Change Hepatitis, Toxic Hyperplasia, Nos Inflammation, Chronic Neoplastic Nodule
Mammary gland		Adenoma, Nos
Pituitary gland		Adenoma, Nos
Preputial gland		Cystic Ducts
Spleen		Fibrosis, Focal
Thyroid		Follicular-Cell Carcinoma
Unspecified	Multiple Organs Nos	Fibroma Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_367

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Necrosis, Focal
Bone marrow		Fibrosis, Myelo
Brain	Cerebrum	Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
Spleen		Fibrosis, Diffuse
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_368

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla Cortex Nos	Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Bone	Skull Sternum	Osteopetrosis Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney	Tubule	Inflammation, Chronic Pigmentation, Nos
Liver		Granuloma, Nos Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node Iliac Lymph Node	Hyperplasia, Reticulum Cell Lymphangiectasis
Mammary gland		Cystic Ducts
Skin		Keratoacanthoma
Spleen		Hematopoiesis
Thyroid		Follicular-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_369

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Neoplastic Nodule
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_370

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Inflammation, Chronic  
Neoplastic Nodule

Bile Duct

Lung  
Lymph node  
Mammary gland  
Pituitary gland

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Fibroadenoma  
Angiectasis  
Cyst, Nos  
Hyperplasia, C Cell  
Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_371

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Liver

Lung

Stomach

Unspecified

Multiple Organs Nos

Cortical Adenoma

Hepatitis, Toxic

Inflammation, Chronic

Hyperkeratosis

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_372

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Ovary		Cyst, Nos
		Pigmentation, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Unspecified	Axilla	Fibroma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_373

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Adenoma, Nos
		Metaplasia, Osseous
Preputial gland		Squamous Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:34

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_374

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Cataract
		Degeneration, Nos
		Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hematopoiesis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
Stomach		Necrosis, Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_375

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Degeneration, Nos
		Granuloma, Nos
		Leukocytosis, Nos
		Necrosis, Focal
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Hematopoiesis
Stomach		Necrosis, Focal
Thyroid		C-Cell Carcinoma
Unspecified		Neurofibrosarcoma
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:34

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_376

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Sternum	Osteopetrosis
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cystic Ducts
		Galactocele
		Hyperplasia, Nos
Nasal cavity	Turbinates Nos	Abscess, Nos
	Turbinates Nos	Hyperkeratosis
	Turbinates Nos	Inflammation, Chronic Diffuse
Pancreas	Islets	Islet-Cell Carcinoma
Preputial gland		Squamous Cell Papilloma
Spleen		Hemosiderosis
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_377

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
		Galactocele
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_378

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Kidney

Inflammation, Chronic

Liver

Hepatitis, Toxic

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_379

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Tubule

Mineralization

Liver

Pigmentation, Nos

Lung

Leukocytosis, Nos

Fibrosarcoma, Metastatic

Lymph node

Mediastinal Lymph Node

Inflammation, Chronic

Mammary gland

Pigmentation, Nos

Adenocarcinoma, Nos

Spleen

Hematopoiesis

Stomach

Acanthosis

Unspecified

Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_380

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland  
Esophagus

Cortical Adenoma  
Acanthosis  
Inflammation, Chronic Diffuse

Eye

Cataract

Intestine Small  
Kidney

Retina  
Duodenum

Degeneration, Nos  
Fibrosis, Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Granuloma, Nos

Lung

Hemorrhage  
Inflammation, Chronic

Lymph node  
Spleen  
Stomach

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell  
Hematopoiesis  
Hemorrhage  
Inflammation, Chronic Diffuse

Uterus

Endometrium

Endometrial Stromal Polyp  
Hyperplasia, Papillary

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_381

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos Synechia, Posterior
	Vitreous Body	Vascularization
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change
Liver		Metamorphosis, Fatty Inflammation, Chronic
Lung		Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Pigmentation, Nos
	Mediastinal Lymph Node	Cystic Ducts Fibroadenoma
Mammary gland		Embryonal Rest
Pancreas		Hyperplasia, Nos
Parathyroid gland		Adenoma, Nos
Pituitary gland		Endometrial Stromal Polyp
Uterus		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_382

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Eye

Retina

Degeneration, Nos

Kidney

Mineralization

Liver

Granuloma, Nos

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Ovary

Granulosa-Cell Carcinoma

Spleen

Hematopoiesis

Unspecified

Multiple Organs Nos

Granulosa-Cell Carcinoma, Metastatic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_383

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Myocardium Nos

Tubule

Liver

Lung

Lymph node

Mandibular Lymph Node

Mesenteric Lymph Node

Mammary gland

Pancreas

Pituitary gland

Skin

Spleen

Thyroid

Lip Nos

Pheochromocytoma

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Pigmentation, Nos

Inflammation, Chronic

Hyperplasia, Lymphoid

Hyperplasia, Lymphoid

Fibroadenoma

Atrophy, Focal

Adenoma, Nos

Angiectasis

Abscess, Nos

Hematopoiesis

C-Cell Carcinoma

Follicular-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_384

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hemorrhage
		Necrosis, Focal
Lung		Inflammation, Chronic
Ovary		Granulosa-Cell Tumor
Pituitary gland		Adenoma, Nos
Preputial gland		Hyperkeratosis
		Necrosis, Focal
		Squamous Cell Carcinoma
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Myelomonocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

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<b>ANIMAL ID:</b> 2_385	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b>
	<b>DOSE:</b> 10000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b>
<hr/> <b>OBSERVATIONS</b>			
Adrenal gland	Cortex Nos	Hyperplasia, Focal	
	Cortex Nos	Metamorphosis, Fatty	
Eye		Cataract	
	Retina	Degeneration, Nos	
		Hemorrhage	
Kidney		Synechia, Posterior	
		Mineralization	
	Tubule	Pigmentation, Nos	
Liver		Focal Cellular Change	
		Granuloma, Nos	
		Pigmentation, Nos	
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid	
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell	
Mammary gland		Fibroadenoma	
Pituitary gland		Adenoma, Nos	
Skin		Hyperkeratosis	
Spleen		Hemosiderosis	
Stomach		Acanthosis	
		Hyperkeratosis	
Thyroid		Ulcer, Perforated	
		Cyst, Follicular Nos	
		Hyperplasia, C Cell	
Unspecified	Multiple Organs Nos	Inflammation, Chronic	
Zymbal gland		Cystic Ducts	
<hr/> <b>PRIMARY CAUSE OF DEATH</b> -			

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_386

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Hyperplasia, Nos
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Diffuse
Kidney		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Granuloma, Nos
		Hyperplasia, Nos
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
		Inflammation, Interstitial
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Pancreas		Atrophy, Focal
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Thyroid		C-Cell Carcinoma
Unspecified	Axilla	Fibroma
	Multiple Organs Nos	Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_387

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland  
Eye

Retina

Pheochromocytoma  
Cataract

Heart  
Intestine Small  
Kidney  
Liver

Myocardium Nos  
Mesentery Nos

Degeneration, Nos  
Synechia, Posterior  
Inflammation, Chronic Diffuse  
Hemangiosarcoma  
Inflammation, Chronic  
Focal Cellular Change  
Granuloma, Nos  
Metamorphosis, Fatty  
Necrosis, Focal

Lung  
Lymph node

Mesenteric Lymph Node  
Mediastinal Lymph Node  
Iliac Lymph Node  
Mesenteric Lymph Node

Inflammation, Chronic  
Erythrophagocytosis  
Hemorrhage  
Hyperplasia, Lymphoid  
Hyperplasia, Lymphoid

Mammary gland  
Pituitary gland  
Spleen  
Thyroid

Fibroadenoma  
Adenoma, Nos  
Hematopoiesis  
C-Cell Adenoma

Unspecified

Multiple Organs Nos

Cyst, Follicular Nos  
Hemangiosarcoma, Invasive

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_388

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic  
Mineralization

Liver

Necrosis, Focal

Lymph node

Mediastinal Lymph Node

Hyperplasia, Reticulum Cell

Unspecified

Multiple Organs Nos

Lymphoma, Nos-Malignant

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_389

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Granuloma, Nos
		Inflammation, Acute Focal
		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mandibular Lymph Node	Pigmentation, Nos
	Mediastinal Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Pigmentation, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
		Hemosiderosis
Stomach		Hyperkeratosis
		Inflammation, Chronic Focal
		Necrosis, Focal
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_390

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Eye

Retina

Degeneration, Nos

Kidney

Mineralization

Tubule

Pigmentation, Nos

Liver

Bile Duct

Hyperplasia, Nos

Lung

Pigmentation, Nos

Ovary

Inflammation, Chronic

Unspecified

Multiple Organs Nos

Cyst, Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_391

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Metamorphosis, Fatty

Pheochromocytoma

Eye

Retina

Degeneration, Nos

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Tubule

Inflammation, Chronic

Pigmentation, Nos

Lung

Alveoli

Histiocytosis

Inflammation, Chronic

Pigmentation, Nos

Lymph node

Mandibular Lymph Node

Hyperplasia, Lymphoid

Mesenteric Lymph Node

Lymphangiectasis

Mammary gland

Adenocarcinoma, Nos

Cystic Ducts

Fibroadenoma

Hyperplasia, Nos

Pancreas

Atrophy, Focal

Pituitary gland

Adenoma, Nos

Thyroid

Follicular-Cell Carcinoma

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_392

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Hepatitis, Toxic

Lung

Mammary gland

Thyroid

Unspecified

Multiple Organs Nos

Fibroadenoma  
Hyperplasia, C Cell  
Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_393

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Cortical Adenoma

Heart

Myocardium Nos

Metamorphosis, Fatty

Intestine Large

Cecum, Colon

Inflammation, Chronic Diffuse

Kidney

Hematoma, Nos

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Pigmentation, Nos

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Fibroadenoma

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Uterus

Cervix Uteri

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_394

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Leukocytosis, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cystic Ducts Hyperplasia, Focal
Spleen		Hematopoiesis
Stomach		Acanthosis
Unspecified		Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_395

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Liver  
Mammary gland

Hepatitis, Toxic

Fibroadenoma

Pituitary gland

Galactocele

Angiectasis

Stomach

Hyperplasia, Focal

Acanthosis

Unspecified

Multiple Organs Nos

Inflammation, Chronic Diffuse

Leukemia, Myelomonocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_396

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
	Sternum	Osteopetrosis
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Pancreas	Islets	Islet-Cell Carcinoma
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Thyroid		Hyperplasia, C Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_397

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Bone	Mandible	Squamous Cell Carcinoma, Invasive
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
		Neoplastic Nodule
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Oral mucosa		Squamous Cell Carcinoma
Stomach		Hyperkeratosis
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Tongue		Edema, Nos
		Inflammation, Chronic Diffuse
		Squamous Cell Carcinoma, Invasive

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_398

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Liver		Hepatitis, Toxic
Lung		Hemorrhage
		Inflammation, Chronic
		Inflammation, Interstitial
Mammary gland		Cystic Ducts
Ovary		Cyst, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Fibrosis, Diffuse
Thyroid		C-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_399

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Angiectasis
	Bile Duct	Cyst, Nos
		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
Lung		C-Cell Carcinoma, Metastatic
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Unspecified	Abdominal Cavity	Necrosis, Fat
Uterus		Hydrometra

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_400

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla Cortex Nos	Hyperplasia, Focal Hyperplasia, Focal Metamorphosis, Fatty
Bone marrow		Hyperplasia, Nos
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node Mesenteric Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Preputial gland		Squamous Cell Carcinoma
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_401

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Esophagus		Hyperkeratosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Lymphangiectasis
	Mediastinal Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Ovary		Cyst, Nos
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
Stomach		Hyperkeratosis
Thyroid		C-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_402

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver  
Lung  
Lymph node

Mesenteric Lymph Node  
Pancreatic Lymph Node

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

Mammary gland

Cystic Ducts  
Fibroadenoma

Skin  
Spleen  
Zymbal gland

Ear

Fibrosarcoma  
Hematopoiesis  
Hyperkeratosis

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_403

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Liver

Lung

Lymph node

Mammary gland

Pituitary gland

Spleen

Mandibular Lymph Node

Mineralization

Metamorphosis, Fatty

Inflammation, Chronic

Carcinoma, Nos, Metastatic

Carcinoma, Nos

Adenoma, Nos

Hematopoiesis

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_404

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Inflammation, Chronic
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Thyroid		Hyperplasia, C Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_405

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Bone marrow  
Kidney

Fibrosis, Myelo  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Hematopoiesis

Lung  
Lymph node

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Lymphoid

Mammary gland  
Pancreas  
Preputial gland  
Spleen

Islets

Fibroadenoma  
Islet-Cell Adenoma  
Keratoacanthoma  
Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_406

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change
Liver		Inflammation, Chronic
Lung		Erythrophagocytosis
Lymph node	Mesenteric Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Leukemia, Monocytic
Unspecified	Multiple Organs Nos	Necrosis, Fat
	Abdominal Cavity	

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_407

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Inflammation, Chronic
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Skin	Foot And Toe Nos	Acanthosis
	Foot And Toe Nos	Inflammation, Chronic Focal
	Foot And Toe Nos	Necrosis, Focal
Spleen		Hemosiderosis
Thyroid		C-Cell Carcinoma
Zymbal gland		Squamous Cell Papilloma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_408

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Metamorphosis, Fatty

Lung  
Lymph node

Mesenteric Lymph Node  
Pancreatic Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Pigmentation, Nos

Pituitary gland  
Spleen  
Stomach

Adenoma, Nos  
Hemosiderosis  
Acanthosis  
Hyperkeratosis  
Inflammation, Chronic Diffuse

Zymbal gland

Cystic Ducts  
Hyperkeratosis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_409

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
		Pigmentation, Nos
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Pigmentation, Nos
Pancreas		Atrophy, Focal
		Ectopia
	Acinus	Hyperplasia, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Ulcer, Perforated
Uterus	Endometrium	Cyst, Nos
		Inflammation, Chronic Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_410

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver  
Lung

Hepatitis, Toxic  
Inflammation, Chronic  
Pigmentation, Nos

Mammary gland

Cystic Ducts  
Fibroadenoma

Stomach

Acanthosis  
Inflammation, Chronic Diffuse  
Necrosis, Focal

Unspecified

Abdominal Cavity  
Multiple Organs Nos

Hemorrhage  
Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_411

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Eye	Anterior Chamber	Empyema
	Cornea	Inflammation, Necrotizing
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Pancreas		Hyperplasia, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
		Hyperplasia, Focal
Stomach		Acanthosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Thyroid		C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_412

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
	Sternum	Osteopetrosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Cyst, Nos
		Focal Cellular Change
		Granuloma, Nos
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
Pancreas	Islets	Islet-Cell Adenoma
	Islets	Islet-Cell Carcinoma
Pituitary gland		Hyperplasia, Focal
Thyroid		Hyperplasia, C Cell
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_413

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Lymph node

Spleen

Thymus

Unspecified

Mandibular Lymph Node

Mesenteric Lymph Node

Multiple Organs Nos

Mineralization

Erythrophagocytosis

Hyperplasia, Reticulum Cell

Hematopoiesis

Hemosiderosis

Carcinoma, Nos

Carcinoma, Nos, Invasive

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_414

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Heart

Cortex Nos

Metamorphosis, Fatty

Kidney

Myocardium Nos

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mixed Tumor, Malignant

Liver

Tubule

Pigmentation, Nos

Focal Cellular Change

Lymph node

Mesenteric Lymph Node

Inflammation, Chronic

Mammary gland

Hyperplasia, Reticulum Cell

Cystic Ducts

Spleen

Fibroadenoma

Hematopoiesis

Unspecified

Abdominal Cavity

Hemosiderosis

Uterus

Necrosis, Fat

Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_415

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebrum	Carcinoma, Nos, Invasive
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
		Inflammation, Chronic Diffuse
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland		Carcinoma, Nos
Spleen		Hemosiderosis
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_416

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebellum Nos	Abscess, Nos
	Cerebellum Nos	Necrosis, Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
Mammary gland	Tubule	Pigmentation, Nos
		Cystic Ducts
		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Zymbal gland		Squamous Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_417

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Cortex Nos

Hyperplasia, Focal

Bone marrow

Metamorphosis, Fatty

Eye

Retina

Hyperplasia, Nos

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Angiectasis

Focal Cellular Change

Granuloma, Nos

Neoplastic Nodule

Pigmentation, Nos

Lung

Inflammation, Chronic

Lymph node

Mandibular Lymph Node

Hyperplasia, Lymphoid

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Abscess, Nos

Adenocarcinoma, Nos

Fibroadenoma

Pituitary gland

Hyperplasia, Focal

Skin

Ear

Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_418

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Lung		Inflammation, Chronic
Lymph node	Pancreatic Lymph Node	Pigmentation, Nos
Spleen		Hematopoiesis
Unspecified	Shoulder	Neurofibrosarcoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_419

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Liver  
Stomach

Hepatitis, Toxic  
Acanthosis  
Hyperkeratosis

Thyroid  
Unspecified

Multiple Organs Nos  
Abdominal Cavity

Hyperplasia, C Cell  
Leukemia, Monocytic  
Necrosis, Fat  
Hydrometra

---

Uterus

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_420

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Necrosis, Focal
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
		Galactocele
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hematopoiesis
Unspecified	Diaphragm Nos	Hernia, Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_421

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos	Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Angiectasis Focal Cellular Change Granuloma, Nos Metamorphosis, Fatty Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Adenocarcinoma, Nos Cystic Ducts Hyperplasia, Nos
Pancreas		Atrophy, Diffuse
Pituitary gland		Adenoma, Nos Cyst, Nos
Skin	Axilla	Fibroma
Thyroid		C-Cell Carcinoma Cyst, Follicular Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_422

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Eye

Kidney

Liver

Lung

Lymph node

Mammary gland

Spleen

Retina

Tubule

Mesenteric Lymph Node

Pancreatic Lymph Node

Pheochromocytoma

Cataract

Degeneration, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Metamorphosis, Fatty

Necrosis, Focal

Inflammation, Chronic

Hyperplasia, Reticulum Cell

Hyperplasia, Reticulum Cell

Cystic Ducts

Fibroadenoma

Galactocele

Hematopoiesis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_423

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
Pancreas		Ectopia
Pituitary gland		Cyst, Nos
		Hyperplasia, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_424

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Bone	Skull	Osteopetrosis
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change
Lung		Alveolar/Bronchiolar Carcinoma Inflammation, Chronic
Lymph node	Mediastinal Lymph Node Mesenteric Lymph Node Mediastinal Lymph Node	Erythrophagocytosis Hyperplasia, Reticulum Cell Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos Cystic Ducts Fibroadenoma
Pituitary gland		Adenoma, Nos Angiectasis
Unspecified	Multiple Organs Nos Flank	Leukemia, Monocytic Neurofibroma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_425

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Eye	Cortex Nos Retina	Metamorphosis, Fatty Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts Hyperplasia, Nos Inflammation, Acute/Chronic
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Preputial gland		Abscess, Nos
Spleen		Hematopoiesis
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_426

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla Cortex Nos	Hyperplasia, Focal Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Bone marrow		Hyperplasia, Nos
Eye	Retina Cornea	Degeneration, Nos Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Large	Cecum, Colon	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
Liver	Tubule Bile Duct	Pigmentation, Nos Focal Cellular Change Inflammation, Chronic Metamorphosis, Fatty Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node Mesenteric Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Lymphoid
Mammary gland		Adenocarcinoma, Nos
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_427

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Carcinoma, Nos
Salivary gland		Atrophy, Nos Inflammation, Acute/Chronic
Spleen	Follicles	Atrophy, Nos Hemosiderosis
Stomach		Acanthosis Hyperkeratosis Inflammation, Chronic Diffuse
Thyroid		Necrosis, Focal C-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_428

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone marrow		Hypoplasia, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
Ovary		Granulosa-Cell Tumor
Pituitary gland		Hyperplasia, Focal
Spleen		Fibrosis, Diffuse
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_429

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Congestion, Nos

Cortex Nos

Hyperplasia, Focal

Heart

Myocardium Nos

Metamorphosis, Fatty

Kidney

Inflammation, Chronic Diffuse

Inflammation, Chronic

Liver

Mineralization

Hepatitis, Toxic

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Fibroadenoma

Preputial gland

Cystic Ducts

Salivary gland

Squamous Cell Carcinoma

Calculus, Unknown Gross Or Micro

Stomach

Acanthosis

Thyroid

Hyperplasia, C Cell

Unspecified

Fibrosarcoma

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_430

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Adenoma, Nos Angiectasis Cyst, Nos
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_431

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic
Intestine Large	Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Unspecified		Fibrous Histiocytoma, Malignant

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_432

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Angiectasis

Heart

Cortex Nos

Hyperplasia, Focal

Kidney

Myocardium Nos

Metamorphosis, Fatty

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Focal Cellular Change

Lung

Alveoli

Histiocytosis

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Fibroadenoma

Galactocele

Pancreas

Atrophy, Focal

Spleen

Hematopoiesis

Uterus

Papillary Adenocarcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_433

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Focal Cellular Change
Liver		Hepatitis, Toxic
Lung	Alveoli	Histiocytosis Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Inflammation, Interstitial Pigmentation, Nos
Mammary gland		Fibroadenoma
Pituitary gland		Cyst, Nos
Stomach		Cyst, Nos
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Follicular-Cell Adenoma Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_434

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Bone	Cortex Nos	Metamorphosis, Fatty
Heart	Skull	Osteopetrosis
Kidney	Myocardium Nos	Inflammation, Chronic Diffuse Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Leukocytosis, Nos Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node Mesenteric Lymph Node Mediastinal Lymph Node	Hyperplasia, Lymphoid Lymphangiectasis Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos Cystic Ducts Galactocele Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		Cyst, Follicular Nos Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_435

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
	Anterior Chamber	Empyema
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
		Squamous Cell Carcinoma, Metastatic
Lymph node	Mesenteric Lymph Node	Atrophy, Nos
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Spleen		Hematopoiesis
Stomach		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Mineralization
Zymbal gland		Cystic Ducts
		Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_436

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Intestine Small

Duodenum

Necrosis, Focal

Kidney

Inflammation, Chronic

Mineralization

Liver

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Focal

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Stomach

Angiectasis

Acanthosis

Hyperkeratosis

Inflammation, Chronic Focal

Ulcer, Perforated

Thyroid

Hyperplasia, C Cell

Uterus

Cervix Uteri

Inflammation, Acute Diffuse

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_437

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Granuloma, Nos Metamorphosis, Fatty
Liver		Inflammation, Chronic
Lung		Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Pigmentation, Nos
	Mediastinal Lymph Node	Squamous Cell Carcinoma, Invasive
Salivary gland	Parotid Gland Nos	Hematopoiesis
Spleen		Hemosiderosis
Unspecified		Squamous Cell Carcinoma, Invasive
Zymbal gland		Squamous Cell Carcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_438

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
Lung		Alveolar/Bronchiolar Carcinoma Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
Stomach		Acanthosis
Thyroid		Follicular-Cell Carcinoma
Unspecified		Fibroma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_439

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Cortical Adenoma

Medulla

Hyperplasia, Focal

Cortex Nos

Hyperplasia, Focal

Bone

Sternum

Metamorphosis, Fatty

Heart

Myocardium Nos

Osteopetrosis

Kidney

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Liver

Tubule

Pigmentation, Nos

Hepatitis, Toxic

Lung

Necrosis, Focal

Unspecified

Multiple Organs Nos

Inflammation, Chronic

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_440

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Eye	Cortex Nos Retina	Metamorphosis, Fatty Degeneration, Nos Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node Mesenteric Lymph Node Mediastinal Lymph Node	Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pancreas	Islets	Islet-Cell Adenoma
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_441

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos Fibroadenoma
Pituitary gland		Angiectasis
Spleen		Hematopoiesis
Thyroid		Follicular-Cell Carcinoma
Unspecified	Abdominal Cavity	Necrosis, Fat

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_442

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Liver

Focal Cellular Change

Granuloma, Nos

Lung

Metamorphosis, Fatty

Inflammation, Chronic

Pigmentation, Nos

Mammary gland

Cystic Ducts

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Spleen

Hematopoiesis

Hemosiderosis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_443

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Medulla

Hyperplasia, Focal

Kidney

Cortex Nos

Metamorphosis, Fatty

Liver

Inflammation, Chronic

Mineralization

Lung

Focal Cellular Change

Granuloma, Nos

Lymph node

Metamorphosis, Fatty

Inflammation, Chronic

Mammary gland

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Adenocarcinoma, Nos

Cystic Ducts

Pituitary gland

Fibroadenoma

Uterus

Adenoma, Nos

Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_444

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebrum	Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Mineralization
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hyperplasia, Lymphoid
	Mediastinal Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Angiectasis
Stomach		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_445

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Cortical Adenoma

Eye

Retina

Metamorphosis, Fatty

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Tubule

Inflammation, Chronic Diffuse

Inflammation, Chronic

Pigmentation, Nos

Liver

Tubular-Cell Adenoma

Angiectasis

Lung

Focal Cellular Change

Lymph node

Mesenteric Lymph Node

Inflammation, Chronic

Mammary gland

Hyperplasia, Reticulum Cell

Pituitary gland

Fibroadenoma

Thyroid

Hyperplasia, Focal

Unspecified

Multiple Organs Nos

C-Cell Adenoma

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_446

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Medulla

Hyperplasia, Focal

Heart

Myocardium Nos

Inflammation, Chronic Focal

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lung

Pigmentation, Nos

Mammary gland

Inflammation, Chronic

Cystic Ducts

Parathyroid gland

Fibroadenoma

Pituitary gland

Hyperplasia, Nos

Unspecified

Angiectasis

Multiple Organs Nos

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_447

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Granuloma, Nos
	Bile Duct	Inflammation, Chronic Necrosis, Focal
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts Fibroadenoma
Pancreas	Islets	Islet-Cell Carcinoma
Spleen		Hematopoiesis
Thyroid		Cyst, Follicular Nos
Unspecified		Fibroma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_448

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic Mineralization
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Hydrometra

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_449

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Inflammation, Chronic Pheochromocytoma
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Metamorphosis, Fatty Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts Hyperplasia, Nos
Stomach		Acanthosis Hyperkeratosis Inflammation, Chronic Diffuse
Thyroid		Ulcer, Perforated
Unspecified	Multiple Organs Nos	Cyst, Follicular Nos Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_450

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Hyperplasia, Focal  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Focal Cellular Change  
Hepatitis, Toxic  
Pigmentation, Nos

Lung

Pancreas

Pituitary gland

Acinus

Inflammation, Chronic  
Hyperplasia, Focal  
Angiectasis

Preputial gland

Thyroid

Unspecified

Multiple Organs Nos

Hyperplasia, Focal  
Squamous Cell Carcinoma  
Hyperplasia, C Cell  
Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_451

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Hemorrhage
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma
Spleen		Hematopoiesis

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_452

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Metamorphosis, Fatty  
Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos  
Focal Cellular Change

Liver  
Lung  
Lymph node  
Mammary gland

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell  
Fibroadenoma  
Galactocele  
Cyst, Nos  
Squamous Cell Carcinoma  
C-Cell Carcinoma  
Cyst, Follicular Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_453

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Brain	Cerebrum	Carcinoma, Nos, Invasive
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver		Necrosis, Focal
Lung	Alveoli	Histiocytosis Inflammation, Chronic
Lymph node	Mediastinal Lymph Node Mediastinal Lymph Node	Erythrophagocytosis Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Carcinoma, Nos
Thyroid	Fossa	Carcinoma, Nos, Invasive
Unspecified		Hyperplasia, C Cell
Zymbal gland	Multiple Organs Nos	Leukemia, Monocytic Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_454

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Rib	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
Lung		Inflammation, Chronic
		Inflammation, Interstitial
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_455

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebrum	Necrosis, Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
		Pigmentation, Nos
Lung		Hemorrhage
		Inflammation, Chronic
Pituitary gland		Angiectasis
Spleen		Necrosis, Nos
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
Unspecified	Multiple Organs Nos	Necrosis, Focal
Uterus		Leukemia, Monocytic
		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_456

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Bone	Skull	Osteopetrosis
	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Necrosis, Focal
Lung		Hemorrhage
		Inflammation, Chronic
Lymph node	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Adenocarcinoma, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
		Hemosiderosis
Thyroid		Cyst, Follicular Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_457

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Small	Duodenum	Fibrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Spinal cord		Degeneration, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_458

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma, Malignant
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Granuloma, Nos Inflammation, Chronic
		Pheochromocytoma, Metastatic
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pancreas		Ectopia
Pituitary gland		Hyperplasia, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Abdominal Cavity	Necrosis, Fat
Zymbal gland		Cystic Ducts

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_459

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Lung

Lymph node

Pancreas

Pituitary gland

Thyroid

Myocardium Nos

Tubule

Bile Duct

Mandibular Lymph Node

Mesenteric Lymph Node

Islets

Pheochromocytoma

Inflammation, Chronic Diffuse

Inflammation, Chronic

Pigmentation, Nos

Focal Cellular Change

Granuloma, Nos

Inflammation, Chronic

Inflammation, Chronic

Hyperplasia, Lymphoid

Hyperplasia, Reticulum Cell

Islet-Cell Adenoma

Angiectasis

Hyperplasia, Focal

C-Cell Carcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_460

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney	Cortex	Cyst, Nos
		Inflammation, Chronic
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pancreas		Atrophy, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_461

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Galactocele
Pituitary gland		Adenoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
		Inflammation, Chronic Focal
		Necrosis, Focal

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_462

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
Thyroid		Hyperplasia, C Cell
Tongue		Acanthosis
		Hyperkeratosis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_463

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Hyperplasia, Focal  
Inflammation, Chronic  
Mineralization

Lung  
Lymph node  
Mammary gland

Mesenteric Lymph Node

Inflammation, Chronic  
Hyperplasia, Reticulum Cell

Pituitary gland  
Thyroid  
Unspecified

Multiple Organs Nos

Cystic Ducts  
Cyst, Hemorrhagic  
C-Cell Carcinoma  
Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_464

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal Pheochromocytoma
Eye	Retina	Cataract Degeneration, Nos Hemorrhage
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Colon	Fibrosis, Focal
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Necrosis, Focal
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland	Mediastinal Lymph Node	Pigmentation, Nos Adenocarcinoma, Nos Cystic Ducts Fibroadenoma Galactocele
Pituitary gland		Adenoma, Nos Angiectasis
Thyroid		C-Cell Adenoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_465

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Tubule

Inflammation, Chronic

Pigmentation, Nos

Liver

Necrosis, Focal

Lung

Inflammation, Chronic

Preputial gland

Acanthosis

Unspecified

Multiple Organs Nos

Hyperkeratosis

Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_466

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Congestion, Nos  
Metamorphosis, Fatty  
Pheochromocytoma

Eye

Retina

Cataract  
Degeneration, Nos  
Hemorrhage

Heart

Cornea

Inflammation, Chronic Diffuse

Kidney

Myocardium Nos

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lymph node

Mandibular Lymph Node

Hyperplasia, Lymphoid

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Pituitary gland

Adenoma, Nos

Thyroid

Follicular-Cell Carcinoma

Unspecified

Back

Fibroma

Multiple Organs Nos

Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_467

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Retina

Cornea

Heart

Kidney

Myocardium Nos

Tubule

Liver

Lung

Lymph node

Mediastinal Lymph Node

Mandibular Lymph Node

Mesenteric Lymph Node

Mediastinal Lymph Node

Mesenteric Lymph Node

Mammary gland

Pancreas

Uterus

Acinus

Pheochromocytoma, Malignant

Cataract

Degeneration, Nos

Inflammation, Chronic Diffuse

Synechia, Posterior

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Granuloma, Nos

Pigmentation, Nos

Inflammation, Chronic

Erythrophagocytosis

Hyperplasia, Lymphoid

Hyperplasia, Reticulum Cell

Pigmentation, Nos

Pigmentation, Nos

Cystic Ducts

Fibroadenoma

Galactocele

Hyperplasia, Focal

Papillary Adenocarcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_468

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Necrotizing
Kidney		Synechia, Posterior
	Tubule	Mineralization
Liver		Pigmentation, Nos
		Angiectasis
		Pigmentation, Nos
Lung	Alveoli	Histiocytosis
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Hyperplasia, Nos
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Salivary gland		Sarcoma, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Inflammation, Chronic
Uterus		Endometrial Stromal Polyp
Zymbal gland		Cystic Ducts

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_469

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Bone	Skull	Osteopetrosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Lymph node	Renal Lymph Node	Lymphangiectasis
Stomach		Inflammation, Acute Diffuse
		Necrosis, Focal
Thyroid		C-Cell Carcinoma
		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_470

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Cortical Adenoma

Eye

Cortex Nos

Hyperplasia, Focal

Kidney

Retina

Metamorphosis, Fatty

Liver

Tubule

Cataract

Degeneration, Nos

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Focal Cellular Change

Metamorphosis, Fatty

Neoplastic Nodule

Pigmentation, Nos

Inflammation, Chronic

Lung

Mesenteric Lymph Node

Erythrophagocytosis

Lymph node

Mesenteric Lymph Node

Pigmentation, Nos

Pancreas

Hyperplasia, Focal

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Stomach

Acanthosis

Hyperplasia, Epithelial

Inflammation, Chronic Diffuse

Thyroid

Ulcer, Perforated

Uterus

Endometrium

Hyperplasia, C Cell

Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_471

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Lung

Inflammation, Chronic

Mammary gland

Cystic Ducts

Fibroadenoma

Hyperplasia, Nos

Pancreas

Ectopia

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Back

Neurofibroma

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_472

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Degeneration, Nos
	Crystalline Lens	Rupture
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
		Pigmentation, Nos
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Hyperplasia, Nos
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Spleen		Hematopoiesis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_473

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Acute Focal
		Inflammation, Chronic
		Mineralization
Liver		Metamorphosis, Fatty
Lung		Congestion, Nos
		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Preputial gland		Inflammation, Acute Diffuse
		Necrosis, Diffuse
		Squamous Cell Carcinoma
Spleen		Hematopoiesis
		Hemosiderosis
Thymus		Congestion, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_474

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma, Malignant
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
		Pigmentation, Nos
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma
		Galactocele
Ovary		Cyst, Nos
Pituitary gland		Cyst, Nos
		Hyperplasia, Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_475

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Eye		Cataract
	Retina	Degeneration, Nos
		Hemorrhage
		Synechia, Anterior
Kidney		Inflammation, Chronic
		Mineralization
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
		Inflammation, Interstitial
		Necrosis, Focal
		Thrombosis, Nos
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
Ovary		Cyst, Nos
Pancreas		Atrophy, Diffuse
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_476

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Large	Large Intestine, Colon	Parasitism
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
		Hyperplasia, Nos
Ovary		Cyst, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Spleen		Hemosiderosis
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_477

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Bone	Skull	Osteopetrosis
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Inflammation, Chronic
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Pituitary gland		Adenoma, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_478

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Eye	Retina Cornea	Cataract Degeneration, Nos Inflammation, Chronic Diffuse
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver		Focal Cellular Change Metamorphosis, Fatty Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node Mediastinal Lymph Node Mesenteric Lymph Node Mediastinal Lymph Node	Erythrophagocytosis Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell Pigmentation, Nos
Pancreas		Acinar-Cell Adenoma
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Hyperplasia, Focal
Spleen		Hemosiderosis
Thyroid		C-Cell Carcinoma
Uterus		Cyst, Follicular Nos Endometrial Stromal Polyp
Zymbal gland		Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_479

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Eye		Cataract
	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
	Tubule	Mineralization
Liver		Pigmentation, Nos
Lung		Hepatitis, Toxic
Lymph node		Inflammation, Chronic
Mammary gland	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Cystic Ducts
Stomach		Carcinoma, Nos
Unspecified	Multiple Organs Nos	Hyperkeratosis
	Abdominal Cavity	Leukemia, Monocytic
		Necrosis, Fat
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_480

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Bone

Skull

Osteopetrosis

Sternum

Osteopetrosis

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Lung

Inflammation, Chronic

Lymph node

Mediastinal Lymph Node

Pigmentation, Nos

Mammary gland

Fibroadenoma

Parathyroid gland

Hyperplasia, Nos

Skin

Cyst, Epidermal Inclusion

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_481

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Pituitary gland		Adenoma, Nos
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
	Chest	Lipoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_482

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Medulla  
Myocardium Nos

Hyperplasia, Focal  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver  
Lymph node  
Mammary gland

Tubule  
Mesenteric Lymph Node

Pigmentation, Nos  
Hepatitis, Toxic  
Hyperplasia, Reticulum Cell  
Adenoma, Nos  
Cystic Ducts  
Galactocele  
Hyperplasia, Nos  
Islet-Cell Adenoma  
C-Cell Carcinoma  
Leukemia, Monocytic

Pancreas  
Thyroid  
Unspecified

Islets  
Multiple Organs Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_483

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Small	Ileum, Ileum	Necrosis, Focal
Kidney		Inflammation, Chronic
		Mineralization
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Inflammation, Chronic
		Necrosis, Focal
Lung		Pigmentation, Nos
		C-Cell Carcinoma, Metastatic
Lymph node	Mesenteric Lymph Node	Inflammation, Chronic
Mammary gland		Hyperplasia, Reticulum Cell
		Fibroadenoma
		Galactocele
Pancreas		Acinar-Cell Adenoma
	Islets	Hyperplasia, Focal
Pituitary gland		Adenoma, Nos
		Angiectasis
Thyroid		C-Cell Carcinoma
Unspecified		Fibroma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_484

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
Bone	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Intestine Small	Duodenum	Leiomyosarcoma
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
		Pigmentation, Nos
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Pancreas		Ectopia
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_485

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Pheochromocytoma
Bone marrow		Hypoplasia, Nos
Esophagus		Hyperkeratosis
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Galactocele
		Hyperplasia, Nos
Pancreas		Atrophy, Focal
	Islets	Islet-Cell Adenoma
Stomach		Acanthosis Inflammation, Chronic Diffuse
		Ulcer, Perforated
Thyroid		C-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_486

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Liver

Inflammation, Chronic

Angiectasis

Focal Cellular Change

Granuloma, Nos

Lung

Lymph node

Inflammation, Chronic

Erythrophagocytosis

Mediastinal Lymph Node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Pituitary gland

Cystic Ducts

Adenoma, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_487

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Brain	Cerebellum Nos	Hemorrhage
	Cerebrum	Hemorrhage
Eye	Retina	Degeneration, Nos
Kidney		Inflammation, Chronic
		Mineralization
Liver		Necrosis, Focal
		Pigmentation, Nos
Lung		Hemorrhage
		Inflammation, Chronic
Stomach	Submucosa	Edema, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_488

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic  
Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Spleen

Hemosiderosis

Thyroid

Hyperplasia, C Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_489

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Degeneration, Hyaline

Hemorrhage

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Liver

Focal Cellular Change

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mammary gland

Cystic Ducts

Fibroadenoma

Neurofibroma

Pancreas

Islets

Islet-Cell Adenoma

Pituitary gland

Adenoma, Nos

Angiectasis

Spleen

Hemosiderosis

Thyroid

C-Cell Carcinoma

Unspecified

Fibrosis, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_490

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Inflammation, Chronic
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
Pituitary gland		Carcinoma, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
Thyroid		C-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_491

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Bone	Mandible	Squamous Cell Carcinoma, Invasive
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
Oral mucosa		Squamous Cell Carcinoma
Salivary gland		Atrophy, Nos
		Inflammation, Chronic
Thyroid		Hyperplasia, C Cell
Unspecified		Squamous Cell Carcinoma, Invasive

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_492

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Brain	Cerebrum	Carcinoma, Nos, Invasive
Eye	Retina	Degeneration, Nos Synechia, Posterior
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Hyperplasia, Reticulum Cell
	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Ovary		Cyst, Nos
Pituitary gland		Carcinoma, Nos
Spleen		Hematopoiesis Hemosiderosis
Stomach		Acanthosis Hyperkeratosis Inflammation, Chronic Diffuse

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_493

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Chronic
Liver	Bile Duct	Inflammation, Chronic
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Spleen		Hemosiderosis
Stomach		Inflammation, Chronic Focal
		Necrosis, Focal
Tongue		Squamous Cell Carcinoma
Unspecified	Multiple Organs Nos	Pigmentation, Nos
Uterus		Abscess, Nos
		Endometrial Stromal Polyp
		Metaplasia, Squamous

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_494

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas		Acinar-Cell Adenoma
Pituitary gland		Cyst, Nos
Spleen		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
		Ulcer, Perforated
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_495

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Heart

Cortex Nos

Metamorphosis, Fatty

Kidney

Myocardium Nos

Inflammation, Chronic Focal

Liver

Inflammation, Chronic

Focal Cellular Change

Lung

Metamorphosis, Fatty

Lymph node

Mesenteric Lymph Node

Inflammation, Chronic

Pituitary gland

Hyperplasia, Reticulum Cell

Stomach

Adenoma, Nos

Acanthosis

Unspecified

Abdominal Cavity

Inflammation, Chronic Diffuse

Ulcer, Perforated

Necrosis, Fat

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_496

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Sternum	Osteopetrosis
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Angiectasis
		Focal Cellular Change
		Granuloma, Nos
		Metamorphosis, Fatty
		Pigmentation, Nos
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
Pancreas		Atrophy, Focal
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Cyst, Nos
		Hydrometra

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_497

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Angiectasis Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos Tubular-Cell Adenocarcinoma
Liver		Focal Cellular Change
Lung		Inflammation, Chronic Pigmentation, Nos
Lymph node	Mesenteric Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts Fibroadenoma Galactocele
Pancreas	Islets	Islet-Cell Carcinoma
Pituitary gland		Adenoma, Nos Angiectasis
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos Abdominal Cavity	C-Cell Carcinoma, Metastatic Necrosis, Fat

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_498

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma, Malignant
Eye	Retina	Degeneration, Nos
Intestine Large	Colon	Hyperplasia, Epithelial
	Colon	Necrosis, Diffuse
	Cecum, Colon	Ulcer, Perforated
Kidney		Mineralization
Liver		Focal Cellular Change
		Metamorphosis, Fatty
		Necrosis, Focal
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mediastinal Lymph Node	Hyperplasia, Lymphoid
	Ileocolic Lymph Node	Hyperplasia, Reticulum Cell
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Ileocolic Lymph Node	Lymphangiectasis
Mammary gland		Hyperplasia, Nos
Ovary		Cyst, Nos
		Granulosa-Cell Tumor
Pituitary gland		Cyst, Nos
Spleen		Hemosiderosis
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Inflammation, Chronic
	Multiple Organs Nos	Pigmentation, Nos
Uterus	Cervix Uteri	Fibrosis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_499

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Bone	Skull	Osteopetrosis
Bone marrow		Hypoplasia, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney	Cortex	Cyst, Nos
		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
		Tubular-Cell Adenoma
Liver		Metamorphosis, Fatty
Lung		Hemorrhage
		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Erythrophagocytosis
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Fibroadenoma
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Stomach		Acanthosis
		Hyperkeratosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Tongue		Inflammation, Chronic Focal
		Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_500

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
		Necrosis, Focal
Lung		Inflammation, Chronic
Mammary gland		Adenocarcinoma, Nos
		Cystic Ducts
Pituitary gland		Adenoma, Nos
Skin		Fibroma
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Myelomonocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_501

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos Metamorphosis, Fatty Necrosis, Focal
Lung	Alveoli	Histiocytosis Inflammation, Chronic Inflammation, Interstitial
Preputial gland		Squamous Cell Carcinoma
Spleen		Fibrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus		Inflammation, Acute

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_502

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Degeneration, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Neoplastic Nodule
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Cystic Ducts
		Fibroadenoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Zymbal gland		Squamous Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_503

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Intestine Small	Jejunum	Fibrosis, Focal
Kidney		Inflammation, Chronic
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
Lung	Alveoli	Histiocytosis
		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Fibroadenoma
		Hyperplasia, Nos
Ovary		Cyst, Nos
Pituitary gland		Angiectasis
		Hyperplasia, Focal
Preputial gland		Squamous Cell Carcinoma
Thyroid		C-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_504

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty Pheochromocytoma
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
Liver	Tubule	Pigmentation, Nos Angiectasis Focal Cellular Change Leukocytosis, Nos Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hemorrhage
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Pancreas		Atrophy, Focal
Spleen		Hematopoiesis
Thyroid		C-Cell Carcinoma
Uterus	Endometrium	Cyst, Nos
	Cervix Uteri	Fibrosarcoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_505

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Cortex Nos

Hyperplasia, Focal  
Inflammation, Chronic  
Mineralization

Liver  
Lymph node  
Spleen

Mesenteric Lymph Node  
Capsule

Hepatitis, Toxic  
Hyperplasia, Reticulum Cell  
Fibrosis, Focal  
Hemorrhage

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_506

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Hepatitis, Toxic
Lung		Inflammation, Chronic
Mammary gland		Cystic Ducts
		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
		Angiectasis
Stomach		Acanthosis
		Inflammation, Chronic Diffuse
		Necrosis, Focal
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Cervix Uteri	Cyst, Nos
		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_507

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Medulla  
Cortex Nos

Hyperplasia, Focal  
Metamorphosis, Fatty  
Pheochromocytoma

Heart

Myocardium Nos

Inflammation, Chronic Focal

Intestine Large

Large Intestine, Colon

Parasitism

Kidney

Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lung

Inflammation, Chronic

Mammary gland

Fibroadenoma

Pancreas

Atrophy, Focal

Pituitary gland

Adenoma, Nos

Thyroid

Angiectasis

Unspecified

Multiple Organs Nos

Follicular-Cell Carcinoma

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_508

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Bone	Sternum	Osteopetrosis
Kidney		Inflammation, Chronic
Liver		Granuloma, Nos
Lung		Inflammation, Chronic
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
		Endometrial Stromal Sarcoma
	Cervix Uteri	Endometrial Stromal Sarcoma, Invasive

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_509

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Nos
	Cortex Nos	Hyperplasia, Focal
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Erythrophagocytosis
	Pancreatic Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
Pituitary gland		Carcinoma, Nos
Thyroid		Follicular-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_510

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Focal  
Inflammation, Chronic  
Mineralization

Tubule

Pigmentation, Nos  
Focal Cellular Change

Liver  
Lung  
Lymph node  
Mammary gland  
Pituitary gland  
Skin  
Spleen  
Thyroid

Mandibular Lymph Node

Inflammation, Chronic  
Hyperplasia, Lymphoid  
Fibroadenoma  
Adenoma, Nos  
Alopecia  
Hematopoiesis  
Hyperplasia, C Cell

---

**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_511

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Necrosis, Focal
Lung		Inflammation, Chronic Pigmentation, Nos Squamous Cell Carcinoma, Metastatic
Lymph node	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Fibroadenoma Galactocele
Pituitary gland		Adenoma, Nos
Skin	Groin	Squamous Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_512

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Medulla

Cortical Adenoma

Heart

Myocardium Nos

Hyperplasia, Focal

Kidney

Inflammation, Chronic Focal

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Bile Duct

Inflammation, Chronic

Metamorphosis, Fatty

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Reticulum Cell

Mediastinal Lymph Node

Pigmentation, Nos

Skin

Squamous Cell Papilloma

Spleen

Hemosiderosis

Stomach

Acanthosis

Inflammation, Chronic Diffuse

Necrosis, Focal

Ulcer, Perforated

Unspecified

Abdominal Cavity

Necrosis, Fat

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_513

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Accidentally Killed

**HISTO:**

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**OBSERVATIONS**

Intestine Large

Large Intestine, Colon

Parasitism

Lung

Inflammation, Chronic

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_514

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Accidentally Killed

**HISTO:**

---

**OBSERVATIONS**

Lung

Inflammation, Chronic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_515

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Accidentally Killed

**HISTO:**

---

**OBSERVATIONS**

Lung	Inflammation, Chronic
Stomach	Necrosis, Focal
Uterus	Hydrometra

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_516

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Myocardium Nos

Tubule

Liver

Lung

Lymph node

Mammary gland

Pancreatic Lymph Node

Pituitary gland

Thyroid

Unspecified

Uterus

Multiple Organs Nos

Endometrium

Pheochromocytoma

Inflammation, Chronic Diffuse

Inflammation, Chronic

Mineralization

Pigmentation, Nos

Hepatitis, Toxic

Inflammation, Chronic

Pigmentation, Nos

Cystic Ducts

Papillary Adenocarcinoma

Adenoma, Nos

Cyst, Nos

Hyperplasia, C Cell

Leukemia, Monocytic

Cyst, Nos

Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

---

**ANIMAL ID:** 2\_517

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Mammary gland		Cystic Ducts Hyperplasia, Diffuse
Pituitary gland		Adenoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Monocytic
Uterus	Cervix Uteri	Fibrosis

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_518

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Bone	Sternum	Osteopetrosis
Eye		Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Mammary gland		Hyperplasia, Nos
Pancreas		Atrophy, Diffuse
Spleen		Hemosiderosis
Thyroid		Hyperplasia, C Cell
Uterus		Fibrosis, Focal
Zymbal gland		Cystic Ducts
		Hyperkeratosis
		Squamous Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_519

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hypertrophy, Nos
	Cortex Nos	Metamorphosis, Fatty
Brain	Cerebellum Nos	Carcinoma, Nos, Invasive
Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
Lung		Inflammation, Chronic
Lymph node	Mediastinal Lymph Node	Hemorrhage
	Mandibular Lymph Node	Hyperplasia, Lymphoid
	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
	Mediastinal Lymph Node	Pigmentation, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
		Galactocele
		Hyperplasia, Nos
		Inflammation, Acute Diffuse
		Necrosis, Focal
Pancreas	Acinus	Hyperplasia, Focal
Pituitary gland		Carcinoma, Nos
Spleen		Hematopoiesis
		Hemosiderosis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_520

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Lung

Lymph node

Mammary gland

Spleen

Myocardium Nos

Tubule

Alveoli

Mesenteric Lymph Node

Mesenteric Lymph Node

Pheochromocytoma

Inflammation, Chronic Diffuse

Inflammation, Chronic

Pigmentation, Nos

Focal Cellular Change

Congestion, Nos

Edema, Nos

Inflammation, Chronic

Hyperplasia, Lymphoid

Hyperplasia, Reticulum Cell

Fibroadenoma

Hemosiderosis

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_521

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Degeneration, Nos  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Liver  
Lymph node  
Mammary gland

Tubule

Pigmentation, Nos  
Hepatitis, Toxic  
Hyperplasia, Reticulum Cell  
Fibroadenoma

Pancreas  
Pituitary gland

Galactocele  
Atrophy, Diffuse

Stomach  
Unspecified

Multiple Organs Nos

Adenoma, Nos  
Cyst, Hemorrhagic  
Necrosis, Focal  
Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_522

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic Focal

Kidney

Inflammation, Chronic

Tubule

Pigmentation, Nos

Lung

Inflammation, Chronic

Stomach

Inflammation, Interstitial

Hyperkeratosis

Unspecified

Multiple Organs Nos

Necrosis, Focal

Uterus

Leukemia, Myelomonocytic

Hydrometra

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_523

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Kidney

Lung

Unspecified

Multiple Organs Nos

Ganglioneuroma

Mineralization

Inflammation, Chronic

Leukemia, Monocytic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_524

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Large  
Kidney

Large Intestine, Colon

Parasitism  
Inflammation, Chronic  
Mineralization

Liver

Tubule

Pigmentation, Nos  
Hepatitis, Toxic  
Pigmentation, Nos

Lung  
Mammary gland  
Pituitary gland

Inflammation, Chronic  
Fibroadenoma  
Hyperplasia, Focal

Skin  
Spleen

Lip Nos

Squamous Cell Papilloma  
Fibrosis, Focal

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

Route: Dosed-Feed

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_525

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla Cortex Nos	Hyperplasia, Focal Metamorphosis, Fatty Pheochromocytoma
Heart Kidney	Myocardium Nos	Inflammation, Chronic Diffuse Inflammation, Chronic Mineralization
Liver Lung Lymph node	Tubule  Mediastinal Lymph Node Mesenteric Lymph Node Mandibular Lymph Node Mesenteric Lymph Node Mediastinal Lymph Node	Pigmentation, Nos Metamorphosis, Fatty Inflammation, Chronic Erythrophagocytosis Erythrophagocytosis Hyperplasia, Lymphoid Hyperplasia, Reticulum Cell Pigmentation, Nos
Mammary gland		Fibroadenoma Hyperplasia, Nos
Preputial gland		Cystic Ducts Hyperkeratosis Hyperplasia, Nos Inflammation, Chronic Diffuse
Stomach		Necrosis, Focal Inflammation, Chronic Diffuse Necrosis, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_526

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Degeneration, Nos

Cortex Nos

Metamorphosis, Fatty

Pheochromocytoma

Eye

Retina

Degeneration, Nos

Heart

Myocardium Nos

Inflammation, Chronic Focal

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Liver

Hepatitis, Toxic

Lung

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Lymphoid

Mammary gland

Cystic Ducts

Fibroadenoma

Galactocele

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_527

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney

Cortex Nos  
Myocardium Nos

Metamorphosis, Fatty  
Inflammation, Chronic Diffuse  
Inflammation, Chronic  
Mineralization

Lung  
Lymph node

Tubule

Pigmentation, Nos  
Inflammation, Chronic

Mammary gland  
Pituitary gland

Mediastinal Lymph Node  
Mesenteric Lymph Node

Erythrophagocytosis  
Hyperplasia, Reticulum Cell

Spleen

Adenocarcinoma, Nos

Unspecified

Multiple Organs Nos

Adenoma, Nos

Hematopoiesis

Adenocarcinoma, Nos, Metastatic

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

**ANIMAL ID:** 2\_528

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Diffuse
Kidney		Inflammation, Chronic Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Hyperplasia, Reticulum Cell
Pituitary gland		Cyst, Nos
Stomach		Acanthosis Inflammation, Chronic Focal Necrosis, Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Monocytic

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: C08991

Test Type: Long-Term

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Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Tremolite

CAS Number: 14567-73-8

Date Report Requested: 10/26/2014

Time Report Requested: 10:05:35

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_529

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 10000 PPM

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Cortex Nos	Metamorphosis, Fatty
Blood vessel	Aorta Nos	Mineralization
Bone marrow		Hypoplasia, Nos
Heart	Myocardium Nos	Inflammation, Chronic Focal
	Myocardium Nos	Mineralization
Intestine Large	Cecum, Colon	Dilatation, Nos
Kidney		Inflammation, Chronic
		Mineralization
	Tubule	Pigmentation, Nos
Liver		Metamorphosis, Fatty
Lung		Inflammation, Chronic
Lymph node	Ileocolic Lymph Node	Lymphangiectasis
	Mesenteric Lymph Node	Pigmentation, Nos
Salivary gland		Atrophy, Diffuse
		Inflammation, Chronic Diffuse
Spleen	Follicles	Atrophy, Nos
		Hemosiderosis
Stomach		Acanthosis
		Hyperkeratosis
Tongue		Inflammation, Acute/Chronic
Unspecified		Abscess, Nos

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

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**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_530

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Liver

Lung

Lymph node

Mammary gland

Ovary

Mesenteric Lymph Node

Mineralization

Focal Cellular Change

Granuloma, Nos

Inflammation, Chronic

Hyperplasia, Reticulum Cell

Fibroadenoma

Cyst, Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C08991

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Tremolite

**CAS Number:** 14567-73-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:05:35

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 2\_531

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 10000 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Medulla

Hyperplasia, Focal

Cortex Nos

Metamorphosis, Fatty

Heart

Myocardium Nos

Inflammation, Chronic Diffuse

Kidney

Inflammation, Chronic

Mineralization

Tubule

Pigmentation, Nos

Mammary gland

Cystic Ducts

Pituitary gland

Adenoma, Nos

Unspecified

Multiple Organs Nos

Leukemia, Monocytic

Abdominal Cavity

Necrosis, Fat

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**PRIMARY CAUSE OF DEATH**

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**\*\* END OF REPORT \*\***