

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

F2_R2

C Number: C99037B
Lock Date: 11/20/2006
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.2.0

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Lab: SRI

CARDIOVASCULAR SYSTEM

Heart

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X .. Lesion present

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ENDOCRINE SYSTEM

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FISCHER 344 RATS MALE	DAY ON TEST																									males (cont...)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 MG/KG	ANIMAL ID	6	3	6	1	6	7	6	7	6	7	7	7	7	7	7	3	6	7	7	7	7	7	7	5	males (cont...)
		5	6	7	6	1	3	2	7	2	3	3	3	0	2	2	2	5	8	3	3	3	3	3	1	4
Bone Marrow		6	7	4	3	5	0	9	7	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myelofibrosis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymph Node		1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4
Mediastinal, Ectasia																										
Mediastinal, Hemorrhage																										
Mediastinal, Hyperplasia, Lymphoid																										
Pancreatic, Hemorrhage																										
Pancreatic, Pigmentation																										
Lymph Node, Mandibular		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																										
Hemorrhage																										
Hyperplasia, Lymphoid																										
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																										
Fibrosis																										
Hematopoietic Cell Proliferation		4																								
Hemorrhage																										
Infarct																										
Pigmentation		2	3	2	2																					
Lymphoid Follicle, Hyperplasia																										
Thymus		M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+

INTEGUMENTARY SYSTEM

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Papilla, Necrosis

Renal Tubule, Accumulation, Hyaline Droplet

4

Urinary Bladder

males
(cont...)

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FISCHER 344 RATS MALE	0 MG/KG	DAY ON TEST																										* TOTALS	
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		ANIMAL ID	7	7	3	7	2	2	4	2	7	2	2	3	7	3	4	1	2	9	0	7	5	6	7	3	1	3	5
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
			6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0		
Esophagus			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																													1 2.0
Inflammation, Acute																													2 3.0
Perforation																													1
Intestine Large, Cecum			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Edema																													1 4.0
Inflammation, Acute																													1 2.0
Intestine Large, Colon			+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	44	
Edema																													2 3.0
Intestine Large, Rectum			+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	A	+	I	+	+	+	+	+	46	
Intestine Small, Duodenum			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	48	
Intestine Small, Ileum			+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	M A	43	
Inflammation, Chronic Active																													1 2.0
Necrosis																													1 1.0
Intestine Small, Jejunum			A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	43	
Liver			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	50	
Basophilic Focus			X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		29	
Clear Cell Focus			X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		19	
Degeneration, Cystic																													13 1.4
Eosinophilic Focus																													6
Hepatodiaphragmatic Nodule																													8

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Heart

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FISCHER 344 RATS MALE	0 MG/KG	ANIMAL ID	DAY ON TEST																									* TOTALS
			07 04	07 09	07 09	07 09	05 00	07 09	05 05	07 09	06 07	05 07	06 07															
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
			6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	0

Thyroid Gland
 Degeneration, Cystic
 Ultimobranchial Cyst
 C-cell, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	46	
																						1							7 1.1
																						2							2 1.5
																						2							2 2.5

GENERAL BODY SYSTEM

Tissue NOS

+

1

GENITAL SYSTEM

Epididymis

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Preputial Gland

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Cyst

1

Hyperplasia

2 2.5

Inflammation, Chronic

13 2.5

3

2

2

2

4

2

2

2

3

3

3

3

2

2

Prostate

50

Fibrosis

1 2.0

Inflammation, Chronic

32 1.8

Epithelium, Hyperplasia

23 1.3

2

1

2

2

1

1

1

1

2

2

1

1

1

2

Seminal Vesicle

50

Testes

50

Germinal Epithelium, Atrophy

5 2.2

Interstitial Cell, Hyperplasia

9 1.3

1

2

1

1

2

2

1

1

1

1

1

1

HEMATOPOIETIC SYSTEM

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FISCHER 344 RATS MALE	DAY ON TEST																									* TOTALS	
		0 7 0 4	0 7 2 9	0 7 2 9	0 5 0	0 7 2	0 5 2	0 7 2	0 6 3	0 7 3	0 5 0	0 6 2	0 7 2	0 5 7	0 6 7	0 7 3	0 7 0	0 7 6	0 7 3	0 7 0	0 6 4	0 6 9					
0 MG/KG	ANIMAL ID	0 0 0 0 2 6	0 0 0 0 2 7	0 0 0 0 3 8	0 0 0 0 3 9	0 0 0 0 3 0	0 0 0 0 3 1	0 0 0 0 3 2	0 0 0 0 3 3	0 0 0 0 3 4	0 0 0 0 3 5	0 0 0 0 3 6	0 0 0 0 3 7	0 0 0 0 3 8	0 0 0 0 3 9	0 0 0 0 4 0	0 0 0 0 4 1	0 0 0 0 4 2	0 0 0 0 4 3	0 0 0 0 4 4	0 0 0 0 4 5	0 0 0 0 4 6	0 0 0 0 4 7	0 0 0 0 4 8	0 0 0 0 4 9		
		0 0 0 0 2 6	0 0 0 0 2 7	0 0 0 0 3 8	0 0 0 0 3 9	0 0 0 0 3 0	0 0 0 0 3 1	0 0 0 0 3 2	0 0 0 0 3 3	0 0 0 0 3 4	0 0 0 0 3 5	0 0 0 0 3 6	0 0 0 0 3 7	0 0 0 0 3 8	0 0 0 0 3 9	0 0 0 0 4 0	0 0 0 0 4 1	0 0 0 0 4 2	0 0 0 0 4 3	0 0 0 0 4 4	0 0 0 0 4 5	0 0 0 0 4 6	0 0 0 0 4 7	0 0 0 0 4 8	0 0 0 0 4 9		
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia																											7 2.6
Myelofibrosis																											5 1.6
Lymph Node		M																									12
Mediastinal, Ectasia																											1 3.0
Mediastinal, Hemorrhage																											2 3.0
Mediastinal, Hyperplasia, Lymphoid																											1 2.0
Pancreatic, Hemorrhage																											1 1.0
Pancreatic, Pigmentation																											1 1.0
Lymph Node, Mandibular		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	2	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Ectasia																											1 3.0
Hemorrhage																											4 1.3
Hyperplasia, Lymphoid																											1 2.0
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Angiectasis																											1 4.0
Fibrosis																											2 2.0
Hematopoietic Cell Proliferation																											6 2.2
Hemorrhage																											1 3.0
Infarct																											1 3.0
Pigmentation			1	3		2																				19 2.0	
Lymphoid Follicle, Hyperplasia		2	2																								10 1.6
Thymus		I	+	+	M	+	I	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	44	

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		0 7 0 4	0 7 2 9	0 7 2 9	0 5 0	0 7 2	0 5 2	0 7 2	0 6 3	0 7 3	0 5 0	0 6 2	0 7 2	0 5 7	0 6 7	0 7 3	0 7 0	0 7 6	0 7 3	0 6 4	0 6 9						
0 MG/KG	ANIMAL ID	0 0 0 0 2 6	0 0 0 0 2 7	0 0 0 0 2 8	0 0 0 0 3 9	0 0 0 0 3 0	0 0 0 0 3 1	0 0 0 0 3 2	0 0 0 0 3 3	0 0 0 0 3 4	0 0 0 0 3 5	0 0 0 0 3 6	0 0 0 0 3 7	0 0 0 0 3 8	0 0 0 0 3 9	0 0 0 0 4 0	0 0 0 0 4 1	0 0 0 0 4 2	0 0 0 0 4 3	0 0 0 0 4 4	0 0 0 0 4 5	0 0 0 0 4 6	0 0 0 0 4 7	0 0 0 0 4 8	0 0 0 0 4 9		
Mammary Gland		+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	I	+	+	+	+	+	+	+	+	48	
Fibrosis																											1 3.0
Hyperplasia																											2 2.0
Duct, Ectasia		3	1		1	1		2	2		1		1		1		1	3	1		2		1		1		28 1.9
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperkeratosis																											1 2.0
Inflammation, Granulomatous																											1 4.0
Epidermis, Hyperkeratosis																											1 4.0
Epidermis, Hyperplasia, Focal																											1 3.0
MUSCULOSKELETAL SYSTEM																											
Bone		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Skeletal Muscle																											2
NERVOUS SYSTEM																											
Brain		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Compression		X																									9
RESPIRATORY SYSTEM																											
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Infiltration Cellular, Histiocyte		2	1	1							1	1							1	1	1	2	1	1	1	1	31 1.1
Inflammation, Chronic																											1 1.0
Metaplasia, Osseous																											2 1.0
Alveolar Epithelium, Hyperplasia																											11 1.7
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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		077	077	073	072	072	074	070	075	072	075	072	073	077	073	070	067	074	061	072	070	067	073	070	076	065	073	070	076
044	099	099	090	099	090	099	095	092	099	097	090	097	093	090	077	070	040	022	097	070	077	070	073	060	074	069	070	074	065
000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
222	222	222	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	244	244	244	244	244	244	244	244	244	244	244	245
666	777	888	999	000	111	222	333	444	555	666	777	888	999	000	111	222	333	444	555	666	777	888	999	000	111	222	333	444	550

*** TOTALS**

SPECIAL SENSES SYSTEM

URINARY SYSTEM

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thyione mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

Papilla, Necrosis

4

1 3.0

Renal Tubule, Accumulation, Hyaline Droplets

1 4.0

Urinary Bladder

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

I .. Insufficient tissue

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ALIMENTARY SYSTEM

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Lab: SRI

FISCHER 344 RATS MALE	12.5 MG/KG	DAY ON TEST	males (cont...)																								
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	7	6	4	5	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	1	0	7	1	2	6	2	2	3	3	3	2	7	2	3	9	3	2	9	6	1	8	7	0	1	3	1
Ulcer																											

CARDIOVASCULAR SYSTEM

Heart

Cardiomyopathy

Hypertrophy

Thrombosis

Epicardium, Inflammation

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1		1	2		2	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2	1	1

1

ENDOCRINE SYSTEM

Adrenal Cortex

Accessory Adrenal Cortical Nodule

Degeneration, Fatty

Hematopoietic Cell Proliferation

Hyperplasia, Focal

Hypertrophy, Focal

Necrosis

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
1																											
1	1	3		1	1	1	2	2		1	2		2	2	3	1											

1

Adrenal Medulla

Hyperplasia

Infiltration Cellular, Lymphocyte

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
3				1	1																						

1

2

Islets, Pancreatic

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

Parathyroid Gland

Hyperplasia, Focal

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	
2																												

Pituitary Gland

Pigmentation

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

2

2

1

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thyione mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE 12.5 MG/KG		DAY ON TEST																										
			ANIMAL ID												males (cont...)													
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7	6	4	5	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
1	0	7	1	2	6	2	2	2	3	3	3	2	2	7	2	3	9	3	2	9	3	2	1	6	1	2		
6	3	7	9	9	2	9	9	9	0	0	0	9	7	6	0	9	9	0	0	9	9	0	8	7	0	9		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	7	5		
Pars Distalis, Angiectasis																											1	
Pars Distalis, Atrophy																											3	
Pars Distalis, Cyst																											X	
Pars Distalis, Hyperplasia, Focal																											X	
Pars Intermedia, Angiectasis																											2	
Pars Intermedia, Hyperplasia, Focal																											2	
Rathke's Cleft, Dilatation																											3	
Thyroid Gland	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+		
Degeneration, Cystic																		1									1	
Ultimobranchial Cyst																			1								4	
C-cell, Hyperplasia																				1								
Follicular Cell, Hyperplasia, Focal																					1							

GENERAL BODY SYSTEM

Tissue NOS

GENITAL SYSTEM

Epididymis

Granuloma Sperm

Penis

Inflammation, Acute

Preputial Gland

Inflammation, Chronic

Necrosis

Prostate

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Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		males (cont...)																				
		DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		ANIMAL ID	7	6	4	5	7	6	7	7	7	7	7	7	7	7	7	7	7	7	6	7
			1	0	7	1	2	6	2	2	3	3	2	7	2	9	3	2	9	1	0	2
			6	3	7	9	9	2	9	9	0	0	0	0	0	0	0	0	0	0	1	9
FISCHER 344 RATS MALE			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.5 MG/KG			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	7	7
			1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
Inflammation, Chronic																						
Mineralization																						
Necrosis																						
Epithelium, Hyperplasia																						
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seminal Vesicle			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																						
Inflammation, Acute																						
Inflammation, Chronic																						
Necrosis																						
Testes			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Germinal Epithelium, Atrophy																						
Interstitial Cell, Hyperplasia																						
			3	1																		
HEMATOPOIETIC SYSTEM																						
Bone Marrow			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																						
Myelofibrosis			3																			
Necrosis																						
Thrombosis																						
Lymph Node			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Mediastinal, Hyperplasia, Lymphoid																						
Pancreatic, Hyperplasia, Lymphoid																						
Lymph Node, Mandibular			M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mesenteric			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																						

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Species/Strain: RATS/F 344/N

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE 12.5 MG/KG	DAY ON TEST ANIMAL ID	males (cont...)																							
		0 7 1 6	0 6 0 3	0 4 7 7	0 5 1 9	0 7 2 9	0 6 2 2	0 7 3 0	0 7 3 0	0 7 2 9	0 6 7 7	0 2 3 9	0 7 3 9	0 7 2 9	0 7 1 6	0 7 0 8	0 6 1 7	0 7 3 0	0 6 1 9	0 7 1 2	0 6 3 9	0 7 1 9			

Hemorrhage
Hyperplasia, Lymphoid
Necrosis

Spleen
Fibrosis
Hematopoietic Cell Proliferation
Infarct
Necrosis
Pigmentation
Lymphoid Follicle, Atrophy
Lymphoid Follicle, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
3		2																								

2	1	1	1	2	1	1																				
2				2			1																			

2				2			1																			
Thymus	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	I	M	+	+	+	M		
Cyst																			X							
Fibrosis																										

INTEGUMENTARY SYSTEM

Mammary Gland
Angiectasis
Hyperplasia
Duct, Ectasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
1	1		1	2	2	2	1	3	2	1																

1	1		1	2	2	2	1	3	2	1																
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Cyst Epithelial Inclusion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperkeratosis																											
Epidermis, Hyperplasia																											
Hair Follicle, Cyst																			X								

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		males (cont...)																				
		DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		ANIMAL ID	7	6	4	5	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
FISCHER 344 RATS MALE	12.5 MG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	7	7	7	7
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
Mineralization		2	2	1	2	2	2	2	1	1	1	1	1	2	2	1	2	1	2	1	2	1
Nephropathy		1		2	2	2	2	2	2	1	2	1	1	1	1	2	1	2	2	3	1	2
Transitional Epithelium, Hyperplasia																			1			
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																			3			
Inflammation, Acute																			4			
Inflammation, Chronic																			2			
Necrosis																			4			
Transitional Epithelium, Hyperplasia																			1			

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	48
Intestine Large, Colon Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	47
																			1	2.0
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	48
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	48
Intestine Small, Ileum Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	47
																			1	1.0
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	47
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Basophilic Focus	X	X	X				X	X		X		X	X	X	X	X	X	X	X	26
Clear Cell Focus	X	X				X		X	X	X	X		X	X	X	X	X	X		23
Degeneration, Cystic				2	1														1	7 1.4
Eosinophilic Focus						X														4
Hematopoietic Cell Proliferation							1													1 1.0
Hepatodiaphragmatic Nodule	X								X	X	X									3
Infiltration Cellular, Mixed Cell	2	1	1			2	1		1	1	X									22 1.3
Mixed Cell Focus	X					X			X		X									6
Necrosis, Focal																				1 1.0
Thrombosis	X																			1
Bile Duct, Hyperplasia	3	3	2	2	3	4	2	3	2	2	3	3	1	3	4	2	1	3	2	1 2 3 45 2.6

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		DAY ON TEST																				* TOTALS	
FISCHER 344 RATS MALE		ANIMAL ID																					
12.5 MG/KG																							
Centrilobular, Necrosis																						1 4.0	
Hepatocyte, Vacuolization Cytoplasmic		3																				10 2.6	
Hepatocyte, Vacuolization Cytoplasmic, Focal			4	2																		2 1.0	
Kupffer Cell, Pigmentation					1																	4 1.8	
Mesentery		2	3																				
Accessory Spleen						+	+	+															
Fat, Necrosis						X																	
Oral Mucosa						1	2	2															
Pancreas																							
Atrophy		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst		2	4	1	2	1	2	1	1	1	1	1	1	2	2	1	3	3	4	1	2	35 1.9	25
Necrosis									X	X	X	X	X	X	X	X	X	X	X	X	X		
Acinus, Hyperplasia, Focal																							
Salivary Glands																							1
Atrophy																							
Inflammation, Chronic																							
Stomach, Forestomach																							50
Edema																							
Ulcer																							
Epithelium, Hyperplasia																						12 2.2	
Stomach, Glandular																							
Cyst																							
Edema																							
Erosion																						1	
Inflammation																							

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Lab: SRI

FISCHER 344 RATS MALE	12.5 MG/KG	DAY ON TEST																					* TOTALS
			0 6 7 7	0 6 2 6	0 7 2 9	0 6 1 0	0 7 1 6	0 6 2 6	0 7 1 9	0 5 9 9	0 7 2 9	0 7 2 9	0 5 2 6	0 7 2 9	0 6 9 9	0 7 2 9	0 7 2 9	0 7 2 9	0 7 2 9	0 7 2 9	0 7 2 9		
ANIMAL ID			0 0 0 0																				
Ulcer																							5 2.6

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy	1	1	1	1				1	2	1		1	2	2		1	1	2	1	2	2	2	41 1.4
Hypertrophy					2																	1 2.0	
Thrombosis	X	X									X				X							4	
Epicardium, Inflammation																						1 1.0	

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Accessory Adrenal Cortical Nodule		1	1	1	1		1	1	1		1	1	1	1	1	1	1	2	1	1	2	19 1.2
Degeneration, Fatty	1	2			2	3				3	1	2	1	1	2	1	1	1	1	1	1	28 1.7
Hematopoietic Cell Proliferation							2			2		2										2 1.5
Hyperplasia, Focal								2		2								1	1			11 1.4
Hypertrophy, Focal																						2 1.5
Necrosis																					1	3 1.3

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia	3	1		1	3			1	1	4		1	1	1	1	1	1	1	1	3	1	25 1.9
Infiltration Cellular, Lymphocyte		1	1																			2 1.0

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
--------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Hyperplasia, Focal																						1 2.0

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pigmentation		2																				6 1.7

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE 12.5 MG/KG	DAY ON TEST ANIMAL ID																									* TOTALS	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hemorrhage																											2 1.0
Hyperplasia, Lymphoid																											2 3.0
Necrosis																											1 2.0
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Fibrosis																											3 3.0
Hematopoietic Cell Proliferation																											7 2.9
Infarct																											1 4.0
Necrosis																											1 2.0
Pigmentation																											24 1.5
Lymphoid Follicle, Atrophy																											1 1.0
Lymphoid Follicle, Hyperplasia																											12 1.6
Thymus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	
Cyst																											1
Fibrosis																											1 3.0

INTEGUMENTARY SYSTEM

Mammary Gland	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Angiectasis																											1 3.0
Hyperplasia																											1 1.0
Duct, Ectasia		2		1	3		2		1		2	2	1	1	1	1	1	2	4	1	2		2	2	2	36 1.6	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst Epithelial Inclusion																			X								2
Hyperkeratosis																			4		2					3	
Epidermis, Hyperplasia																											1 2.0
Hair Follicle, Cyst																											1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		DAY ON TEST																				* TOTALS	
FISCHER 344 RATS MALE		ANIMAL ID																					
12.5 MG/KG																							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6	6	7	7	6	6	7	6	7	5	7	7	7	5	7	6	7	7	7	7	7	6		
7	2	2	2	1	2	1	1	2	9	1	2	0	2	5	2	8	2	2	2	0	2		
7	6	9	9	0	6	6	0	9	9	6	2	9	2	9	6	9	9	2	9	2	9		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9		
6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7		

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Femur, Osteopetrosis																						2 2.0
Skeletal Muscle																						4
Fibrosis																						2 3.5

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Compression																						4
Pigmentation																						1 1.0
Peripheral Nerve																						1
Spinal Cord																						1

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Infiltration Cellular, Histiocyte	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43 1.0
Inflammation, Chronic																						6 1.3
Metaplasia, Osseous																						5 1.4
Alveolar Epithelium, Hyperplasia	1	2				1	2	1		2		2	2	2	1	1	1	1	1	1	1	17 1.2
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Foreign Body																						8 1.8
Inflammation, Chronic	3							1														15 1.6
Goblet Cell, Hyperplasia																						1 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	48			
Casts Protein	1	1		1		1		3			1	1	2		2	1	3	1	2	1		30	1.5	
Cyst																						3		
Hydronephrosis																						1	3.0	
Infarct																						1	3.0	
Inflammation, Suppurative																						2	2.5	
																						1		

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		DAY ON TEST																				* TOTALS	
FISCHER 344 RATS MALE		ANIMAL ID																					
12.5 MG/KG																							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6	6	7	7	6	6	7	6	7	5	7	7	7	5	7	6	7	7	7	7	7	6		
7	2	2	2	1	2	1	1	2	9	1	2	0	2	5	2	8	2	2	2	0	2		
7	6	9	9	0	6	6	0	9	9	6	2	9	2	9	6	9	9	2	9	2	9		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	0		
6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7		
Mineralization	1	2	1	2	1	1	1	2	1	2	1	1	1	1	1	1	1	2	2	2	33 1.4		
Nephropathy	1	1	1	2	1	1	2	1	3	1	1	2	2	2	3	1	2	2	3	2	44 1.7		
Transitional Epithelium, Hyperplasia																					1 1.0		
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Atrophy																					1 3.0		
Inflammation, Acute																					1 4.0		
Inflammation, Chronic																					1 2.0		
Necrosis																					1 4.0		
Transitional Epithelium, Hyperplasia																					1 1.0		

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE	DAY ON TEST																					males (cont...)	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25 MG/KG	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		5	2	6	7	6	7	6	7	7	6	4	6	6	6	5	0	7	7	4	6	4	0
		0	0	7	3	3	5	3	7	2	2	7	0	5	5	9	0	7	2	5	1	8	3
		0	0	0	5	0	5	0	7	9	9	7	7	2	8	2	8	6	9	0	5	0	8
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	2	5

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thyione mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

CARDIOVASCULAR SYSTEM

Heart

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE	DAY ON TEST																									males (cont...)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25 MG/KG	ANIMAL ID	5	2	6	7	6	7	6	7	7	6	4	6	6	6	5	7	7	4	6	4	7	7	6	6	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Duct, Ectasia	1	2	2	2	1			1	3	2	1		2	3		2	2	2	2	2	2	1	1	1	1	1
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst Epithelial Inclusion																										X
Hyperkeratosis																										2
Inflammation, Chronic																										4
Mineralization																										2
Necrosis																										3
Epidermis, Hyperplasia																										1
Subcutaneous Tissue, Fibrosis																										1

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Femur, Osteopetrosis																										

Skeletal Muscle

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Compression																										X
Mineralization																										X
Necrosis																										

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Infiltration Cellular, Histiocyte	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Inflammation, Chronic																										2

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

		FISCHER 344 RATS MALE																				males (cont...)				
25 MG/KG	ANIMAL ID	DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	males (cont...)			
		5	2	6	7	6	7	6	7	7	6	4	6	6	6	5	7	7	4	6	4	7				
		0	7	3	3	5	3	7	2	2	7	0	5	0	5	9	0	7	2	5	1	8	3			
		0	0	5	0	5	0	7	9	9	7	7	2	8	2	8	6	9	2	9	5	5	8			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2			
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2			
Metaplasia, Osseous		2																								
Alveolar Epithelium, Hyperplasia		1	1			2		2				1				1				1		2		1		
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Foreign Body		1						1				2						2	1						2	
Inflammation, Chronic		2						4			3	2			1			1						1	2	
Goblet Cell, Hyperplasia		2									1	2			1			2						1	2	
Respiratory Epithelium, Hyperplasia																										
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
SPECIAL SENSES SYSTEM																										
Eye		+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+		
Cataract		2						2			1						1		2				1		1	
Bilateral, Cataract																										
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Inflammation, Chronic		1													1										1	
Lacrimal Gland																+										
Zymbal's Gland		+																								
URINARY SYSTEM																										
Kidney		+	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Casts Protein		1										1		1		1	1			1	2	3			1	
Mineralization		2	1	2	1	2	1	2	1	1	1	2	2	2	2	1	2	2	2	2	2	2	2	2	1	
Nephropathy		1	1	1	1	2	1	3	2	1	2	1	2	1	1	2	2	2	2	1	1	3	1			
Transitional Epithelium, Hyperplasia												1								2	1					

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

- 1) Minimal
- 3) Moderate
- 2) Mild
- 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

FISCHER 344 RATS MALE	DAY ON TEST																					males (cont...)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	2	6	7	6	7	6	7	7	6	4	6	6	6	5	0	7	7	4	6	4	0
	0	7	3	3	5	3	7	2	2	7	0	5	5	9	0	7	2	2	5	1	8	3
	0	0	5	0	5	0	7	9	9	7	7	2	8	2	8	6	9	9	0	5	0	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2

Urinary Bladder

males
(cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grad

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

CARDIOVASCULAR SYSTEM

Heart

* .. Total animals with tissue examined

+ .. Tissue examine

X .. Lesion present

with lesion and mean severity grad

M .. Missing tissue

A .. Autolysis precludes evaluation

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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CAS Number: THUJONEMIXAB

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Lab: SRI

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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I .. Insufficient tissue

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TDMS No. 99037 - 05

Test Type: CHRONIC

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Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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Lab: SRI

FISCHER 344 RATS MALE	DAY ON TEST																									* TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25 MG/KG	ANIMAL ID	5	4	1	7	7	5	4	5	7	7	7	7	6	6	7	6	3	6	7	3	7	6	6	6	
		3	0	6	3	3	9	8	4	3	0	2	0	3	2	2	3	6	2	5	9	1	3	1	3	6
25 MG/KG	ANIMAL ID	2	4	3	0	0	9	5	0	0	2	0	9	1	3	9	4	2	9	3	0	8	7	6	6	8
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 MG/KG	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25 MG/KG	ANIMAL ID	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

Thyroid Gland

Degeneration, Cystic

Ultimobranchial Cyst

C-cell, Hyperplasia

Follicular Cell, Hyperplasia, Focal

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	A	+	+	A	+	42
																	1									4 1.0
																										1 1.0
																										2 3.0
																										1 2.0

GENERAL BODY SYSTEM

Tissue NOS

+																										2
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---

GENITAL SYSTEM

Epididymis

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Preputial Gland

Hyperplasia

Inflammation, Chronic

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																										1 3.0
																										18 2.2

Prostate

Fibrosis

Inflammation, Chronic

Necrosis

Epithelium, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																										1 2.0
																										23 2.3
																										1 4.0
																										18 1.3

Seminal Vesicle

Inflammation, Acute

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																										1 1.0

Testes

Germinal Epithelium, Atrophy

Interstitial Cell, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																										3 2.7
																										6 1.7

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M .. Missing tissue

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

INTEGUMENTARY SYSTEM

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Lab: SRI

FISCHER 344 RATS MALE	DAY ON TEST																					* TOTALS						
		0 5 3 2	0 4 0 2	0 1 6 3	0 7 3 0	0 5 9 5	0 4 8 0	0 7 3 0	0 7 2 0	0 6 3 1	0 6 6 9	0 7 2 9	0 6 9 4	0 7 2 1	0 7 2 9	0 7 1 3	0 7 1 3	0 7 1 3	0 6 6 8									
25 MG/KG	ANIMAL ID	0 0 1 2 6	0 0 1 2 7	0 0 1 2 8	0 0 1 2 9	0 0 1 3 0	0 0 1 3 1	0 0 1 3 2	0 0 1 3 3	0 0 1 3 4	0 0 1 3 5	0 0 1 3 6	0 0 1 3 7	0 0 1 3 8	0 0 1 3 9	0 0 1 4 0	0 0 1 4 1	0 0 1 4 2	0 0 1 4 3	0 0 1 4 4	0 0 1 4 5	0 0 1 4 6	0 0 1 4 7	0 0 1 4 8	0 0 1 4 9	0 0 1 5 0		
Mammary Gland		+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	49	34	1.8			
Duct, Ectasia										2	1	2	1	1	2	1	3	1	3	2	1	3	2					
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Cyst Epithelial Inclusion																								X		4		
Hyperkeratosis																								2		5	2.8	
Inflammation, Chronic																								2		4	2.3	
Mineralization																								1		1	2.0	
Necrosis																								3		1	3.0	
Epidermis, Hyperplasia																								2		3	2.7	
Subcutaneous Tissue, Fibrosis																								1		1	1.0	
MUSCULOSKELETAL SYSTEM																												
Bone		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	2	2.0		
Femur, Osteopetrosis																								2				
Skeletal Muscle		+																						2				
NERVOUS SYSTEM																												
Brain		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Compression																								X		X	11	
Mineralization																								2		1	2.0	
Necrosis																								4		1	4.0	
RESPIRATORY SYSTEM																												
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Infiltration Cellular, Histiocyte		1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	33	1.1			
Inflammation, Chronic																								1		2	1.5	

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Lab: SRI

		DAY ON TEST																				* TOTALS
FISCHER 344 RATS MALE		ANIMAL ID																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5	4	1	7	7	5	4	5	7	7	7	7	6	6	7	6	3	6	7	3	7	6	
3	0	6	3	3	9	8	4	3	0	3	2	3	6	2	5	9	1	2	3	1	3	
2	4	3	0	0	9	5	0	0	2	0	9	1	3	9	4	2	9	3	0	8	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	
6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	
Metaplasia, Osseous					1	1																6 1.2
Alveolar Epithelium, Hyperplasia					1	1	2	2	1	4	1	1	1	1	1	1	1	1	1	1	3	19 1.5
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Foreign Body																						9 1.4
Inflammation, Chronic	1																					13 1.7
Goblet Cell, Hyperplasia																						3 1.7
Respiratory Epithelium, Hyperplasia																						10 1.6
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
SPECIAL SENSES SYSTEM																						
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	A	+	46
Cataract																			1			10 1.3
Bilateral, Cataract																						2 1.5
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic	1																					4 1.0
Lacrimal Gland																						1
Zymbal's Gland																						1
URINARY SYSTEM																						
Kidney	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	A	+	A	+	+	44
Casts Protein							1	2	1	3	1	1	1	1	1	2	4					22 1.5
Mineralization	2	1	1	2	2	2	2	2	1	2	2	2	2	2	1	1	2	2	2	1	1	41 1.6
Nephropathy	1	2	2	2	2	1	2	3	1	2	2	2	1	2	4	1	2	1	1	2	2	41 1.7
Transitional Epithelium, Hyperplasia																						4 1.3

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

Urinary Bladder

*** TOTALS**

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2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

DAY ON TEST

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	4	5	2	3	6	4	2	3	2	1	6	3	3	5	3	5	3	3	2	2	2	3
0	9	2	1	3	5	0	7	8	2	4	3	6	7	3	6	3	1	7	0	2	0	3	8
3	4	2	5	5	9	3	0	1	3	3	5	7	9	0	8	9	9	4	5	5	5	3	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)

FISCHER 344 RATS MALE

50 MG/KG

ANIMAL ID

ALIMENTARY SYSTEM

Esophagus
HyperkeratosisIntestine Large, Cecum
Necrosis, Lymphoid

Intestine Large, Colon

Intestine Large, Rectum
Inflammation, ChronicIntestine Small, Duodenum
Necrosis, LymphoidIntestine Small, Ileum
Inflammation, Acute

Intestine Small, Jejunum

Liver
Basophilic Focus

Clear Cell Focus

Degeneration, Cystic

Eosinophilic Focus

Fibrosis

Hepatodiaphragmatic Nodule

Infiltration Cellular, Mixed Cell

Mixed Cell Focus

+ +

+ A + + + + + A + + + A + + + + + + + + + + + + + + + +

A A A + + A A A A A A A + + A + + A A A A A A + + + +

+ A + + + + + + + + A + + + + + + + + + + + + + + + + +

A A A + A + A A A + A + + + + + + + + + + + + + + + + +

+ A A + + A A A + A A A + A A A A A A A M A A + + + + A

A A A + + + + A + + A + + + + A A + + A A + + + + + + A

+ +

X X

1 1

X X

1 1

X X

2

X

1

1

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TDMS No. 99037 - 05

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Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| | | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | males
(cont...) | | | |
|--|-----------|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|--------------------|---|--|
| 50 MG/KG | ANIMAL ID | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | males
(cont...) | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 6 | 0 | 4 | 5 | 2 | 3 | 6 | 4 | 2 | 3 | 2 | 1 | 6 | 3 | 3 | 5 | 3 | 5 | 3 | 3 | 2 | | | |
| | | 0 | 9 | 2 | 1 | 3 | 5 | 0 | 7 | 8 | 2 | 4 | 3 | 6 | 7 | 3 | 6 | 3 | 1 | 7 | 0 | 9 | 5 | | |
| | | 3 | 4 | 2 | 5 | 5 | 9 | 3 | 0 | 1 | 3 | 3 | 5 | 7 | 9 | 0 | 8 | 9 | 9 | 4 | 5 | 5 | 3 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | | |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bile Duct, Hyperplasia | | 2 | 2 | 1 | | 2 | 2 | | | | | | | | | | | | | | | 2 | 2 | | |
| Centrilobular, Necrosis | | | | | | | | 3 | | | | | | | | | | | | | | 4 | | | |
| Hepatocyte, Vacuolization Cytoplasmic | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| Hepatocyte, Vacuolization Cytoplasmic, Focal | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | + | | |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | | |
| Stromal Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Stomach, Glandular | | + | + | A | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X .. Lesion present

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M .. Missing tissue

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

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Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland

Epididymis

Penis

Preputial Gland Inflammation, Chronic

Prostate

- Inflammation, Chronic
- Epithelium, Hyperplasia

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1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|--|
| Esophagus
Hyperkeratosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 | | |
| Intestine Large, Cecum
Necrosis, Lymphoid | A | + | A | + | + | + | + | + | + | A | + | + | A | + | + | + | A | A | + | A | + | 39 | 1 | 1.0 | |
| Intestine Large, Colon | A | + | A | A | + | + | A | A | A | A | + | + | A | A | A | + | A | A | A | A | A | 15 | | | |
| Intestine Large, Rectum
Inflammation, Chronic | + | + | A | + | + | + | + | + | + | A | + | + | A | + | M | + | + | + | A | + | + | 42 | 1 | 2.0 | |
| Intestine Small, Duodenum
Necrosis, Lymphoid | + | + | A | + | + | + | A | + | + | A | + | + | A | + | + | A | A | + | + | A | A | 33 | 1 | 1.0 | |
| Intestine Small, Ileum
Inflammation, Acute | A | + | A | + | + | + | A | A | A | A | + | + | A | A | A | + | A | M | A | A | A | 16 | 1 | 1.0 | |
| Intestine Small, Jejunum | A | + | A | A | + | + | A | A | A | A | + | + | A | A | A | + | A | A | A | A | A | 25 | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | X | + | + | + | + | 50 | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | X | | | | | | | | 3 | | |
| Infiltration Cellular, Mixed Cell | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.1 | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | | | 2 | | |

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alpha/beta Thujone mixture

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Lab: SRI

| FISCHER 344 RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------|
| | | 0
2
6
9 | 0
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0 | 0
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2 | 0
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6 | 0
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7 | 0
4
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4 | 0
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1 | 0
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3
2 | 0
2
1
9 | 0
2
1
3 | 0
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4 | 0
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7 | 0
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3
5 | 0
3
3
6 | 0
4
5
7 | 0
1
3
9 | 0
2
2
0 | 0
3
2
0 | | |
| 50 MG/KG | ANIMAL ID | 0
0
0
1
7
6 | 0
0
0
1
7
7 | 0
0
0
1
8
8 | |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | 3 1.7 |
| Bile Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 20 2.1 |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | | | | 5 2.8 |
| Hepatocyte, Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Hepatocyte, Vacuolization Cytoplasmic, Focal | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | 4 |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | 2 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | 18 1.8 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | 6 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stromal Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Erosion | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |

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+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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TDMS No. 99037 - 05

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Route: Gavage

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

CARDIOVASCULAR SYSTEM

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Accessory Adrenal Cortical Nodule | | | | | | | | | | | 1 | | | 1 | | | | | | | 4 1.0 |
| Degeneration, Fatty | 1 | 1 | 1 | 1 | | 1 | 2 | 2 | | 2 | 1 | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 34 1.2 |
| Hyperplasia, Focal | | | | | | | | | | | 1 | | | | | | | | 1 | | 4 1.3 |
| Necrosis | | | | | | | | | | | | | | | | | | 2 | | | 2 1.5 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 49 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 49 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Pigmentation | | | | | | | | | | | 1 | | | | | | | | | | 1 1.0 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | 2 | | | | | | | | | 3 1.7 |
| Pars Distalis, Atrophy | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Pars Distalis, Cyst | | | | | | | | | X | | | | | X | | | | | | | 2 |

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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Lab: SRI

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | |
|-------------------------|---|---|---|-------|
| Coagulating Gland | | + | | 1 |
| Epididymis | + | + | + | 50 |
| Penis | | | | 1 |
| Preputial Gland | + | + | + | 50 |
| Inflammation, Chronic | 3 | 1 | | 5 2.2 |
| Prostate | + | + | + | 50 |
| Inflammation, Chronic | | 1 | 1 | 9 2.0 |
| Epithelium, Hyperplasia | | 2 | | 4 1.5 |

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Lab: SRI

MUSCULOSKELETAL SYSTEM

Bone

NERVOUS SYSTEM

Brain Compression

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Lab: SRI

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

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2) Mild 4) Marked

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Species/Strain: RATS/F 344/N

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URINARY SYSTEM

*** END OF MALE DATA ***

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ALIMENTARY SYSTEM

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| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|----------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 0
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9 | 0
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3
1 | 0
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3
1 | | |
| 0 MG/KG | ANIMAL ID | 0
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2
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7 | 0
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8 | 0
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9 | 0
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6 | 0
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2
1 | 0
0
2
2
2 | 0
0
2
2
3 | 0
0
2
2
4 | 0
0
2
2
5 |
| Mesentery | | +
3 | +
2 | | | +
3 | | +
2 | | +
2 | | | | | | | | | | +
2 | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Edema | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Edema | | | | | | | | | | | | | | | | | | | | | | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

Blood Vessel

Heart

Cardiomyopathy

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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ENDOCRINE SYSTEM

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| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 0
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0 | 0
7
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0 | 0
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1 | | | | | |
| 0 MG/KG | ANIMAL ID | 0
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8 | 0
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9 | 0
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1 | 0
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2 | 0
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3 | 0
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4 | 0
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5 | 0
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6 | 0
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7 | 0
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9 | 0
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3 | 0
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4 | 0
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5 | 0
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2
2
6 | 0
0
2
2
7 | 0
0
2
2
8 | 0
0
2
2
9 | 0
0
2
3
0 |
| Lymph Node, Mandibular Hyperplasia, Lymphoid | | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mesenteric Atrophy Ectasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hemorrhage | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen Fibrosis | | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic Cell Proliferation | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pigmentation | | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 1 | 3 | 2 | 3 | 4 | | | | | | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thymus | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Ectopic Parathyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland Fibrosis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Ectasia | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | |
| Skin Cyst Epithelial Inclusion | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thyione mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

ALIMENTARY SYSTEM

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----|----|----------|
| | | 0
7
3
0 | 0
7
3
0 | 0
5
4
5 | 0
6
2
2 | 0
6
3
3 | 0
7
7
0 | 0
7
3
0 | 0
7
3
0 | 0
5
7
9 | 0
6
3
1 | 0
6
6
2 | 0
4
9
9 | 0
4
6
2 | 0
4
5
2 | 0
5
4
7 | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
6
5
9 | | | | | | |
| 0 MG/KG | ANIMAL ID | 0
0
2
2
6 | 0
0
2
2
7 | 0
0
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8 | 0
0
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9 | 0
0
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9 | 0
0
4
9 | 0
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4
9 | 0
0
4
9 | 0
0
4
9 | 0
0
4
9 | | | |
| Mesentery | | +
2 | +
2 | | +
2 | | | | | | | | +
2 | +
2 | +
2 | | | | | | | | | | 13 | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 13 | 2.2 |
| Pancreas | | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | A | +
1 | +
1 | +
1 | +
1 | +
1 | +
1 | 49 | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 25 | 1.4 |
| Cyst | | X | X | | | | | | | | | | | | | | | X | X | X | X | | | | 14 | |
| Acinus, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Salivary Glands | | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
1 | +
+ | +
+ | +
+ | +
+ | +
+ | +
1 | 50 | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 9 | 1.1 |
| Stomach, Forestomach | | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
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+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
1 | 50 | | |
| Edema | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 7 | 1.4 |
| Stomach, Glandular | | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
+ | +
3 | +
A | +
+ | +
+ | +
+ | +
+ | +
1 | 48 | | |
| Edema | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Tongue | | | | | | | | | | | | | | | | | | +
2 | | | | | | | 1 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cardiomyopathy | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 40 | 1.1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|---|----------|--------|
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9 | | | | | | | |
| 0 MG/KG | ANIMAL ID | 0
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3 | 0
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4 | 0
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5 | 0
0
2
2
6 | 0
0
2
2
7 | | | | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | 47 | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | 47 | |
| Accessory Adrenal Cortical Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 1.4 |
| Degeneration, Fatty | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | 23 1.9 |
| Hematopoietic Cell Proliferation | | 3 | 2 | | 2 | 3 | | | | | | | | | | | 1 | 1 | 3 | 3 | 3 | | | | | | 1 1.0 |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 1.5 |
| Hypertrophy, Focal | | 2 | 1 | 1 | 1 | 1 | | | | | | | | | | | 1 | 2 | 4 | 1 | | | | | | | 7 1.7 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | 48 | |
| Hyperplasia | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | 7 1.1 | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | 49 | |
| Hyperplasia | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | M | 47 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 1.6 |
| Pars Distalis, Angiectasis | | 1 | | 3 | 2 | | | | | | | | | 2 | | | | | | 2 | | | | | | | 9 2.2 |
| Pars Distalis, Cyst | | | | | | X | | | | | | | | X | X | X | | | | | X | | | | | | 18 |
| Pars Distalis, Hyperplasia, Focal | | 2 | | | | | | | | | | | | 1 | | | | | | | | | | | | | 5 1.6 |
| Pars Intermedia, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Pars Intermedia, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Rathke's Cleft, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 1.3 |
| Thyroid Gland | | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | A | A | A | A | + | M | + | + | + | A | 42 |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

GENERAL BODY SYSTEM

Tissue NOS + 1
Fat, Mediastinum, Necrosis 2 1 2.0

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

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Species/Strain: RATS/F 344/N

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alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | 12.5 MG/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|---------------------------------------|------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | ANIMAL ID | 7 | 7 | 4 | 6 | 6 | 1 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | |
| | | | 3 | 3 | 3 | 1 | 0 | 8 | 0 | 2 | 3 | 3 | 3 | 6 | 3 | 8 | 4 | 3 | 2 | 3 | 3 | 3 | 1 | 8 | 1 | 1 | 1 | |
| | | | 0 | 0 | 0 | 2 | 1 | 9 | 3 | 7 | 1 | 1 | 1 | 3 | 1 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 8 | 1 | 1 | |
| Esophagus | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Intestine Large, Cecum | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hemorrhage | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Intestine Large, Colon | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | |
| Intestine Large, Rectum | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| Intestine Small, Duodenum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mixed Cell | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bile Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatocyte, Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kupffer Cell, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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+ .. Tissue examined microscopically

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | 12.5 MG/KG | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|------------------------------|------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|--|
| | | | 0730 | 0730 | 0740 | 0620 | 0620 | 0619 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | 0719 | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Atrophy | | | + | + | + | + | A | + | + | + | + | 2 | 1 | 1 | + | + | + | + | + | + | + | + | + | + | + | + | 2 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Edema | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

Tooth Degeneration

+
22

CARDIOVASCULAR SYSTEM

ENDOCRINE SYSTEM

Adrenal Medulla +
 Hyperplasia 2 1 4
 Infiltration Cellular, Lymphoid 1

Islets, Pancreatic + + + + A +

Pituitary Gland

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

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TDMS No. 99037 - 05

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alpha/beta Thyione mixture

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Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

Cvs

7

INTEGUMENTARY SYSTEM

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

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ALIMENTARY SYSTEM

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Species/Strain: RATS/F 344/N

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE
12.5 MG/KG | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---------------------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | 0
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8 | 0
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8 | 0
7
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1 | 0
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2 | 0
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6
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9 | 0
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Tooth
Degeneration1
1 2.0

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 | 1.1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Accessory Adrenal Cortical Nodule | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1.6 |
| Degeneration, Fatty | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | 18 | 1.8 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Hyperplasia, Focal | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | 14 | 1.7 |
| Hypertrophy, Focal | | | | | 2 | 1 | | | | | | | | | | | | | | | | | | 6 | 1.3 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 5 | 1.8 |
| Infiltration Cellular, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Pigmentation | 1 | | | | | | | | | | | | | | | | | | | | | | | 5 | 1.4 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | 4 | 2.0 |
| Pars Distalis, Cyst | X | | X | | X | | | | | | | | | | | | | | | | | | | 20 | |
| Pars Distalis, Hyperplasia, Focal | | | | | 2 | | | | | | | | | | | | | | | | | | | 13 | 2.0 |

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Lab: SRI

| FISCHER 344 RATS FEMALE
12.5 MG/KG | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|---------------------------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|--------|--|
| | | 0
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8 | 0
7
3
2 | 0
6
6
0 | 0
7
3
1 | 0
7
3
1 | 0
6
9 | 0
7
3
1 | | | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | | |
| Myelofibrosis | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | |
| Lymph Node | | + | | + | + | | | + | + | | | | | | | | + | | | | 8 | | | |
| Deep Cervical, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 | |
| Deep Cervical, Pigmentation | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 | |
| Mediastinal, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 3 | 2 3.0 | |
| Mediastinal, Hyperplasia, Lymphoid | 3 | | | 2 | | | | | | | | | | | | | | | | | | 1 | 6 2.7 | |
| Mediastinal, Pigmentation | 2 | | | | | | | | | | | | | | | | | | | | | 2 | 5 2.2 | |
| Pancreatic, Hemorrhage | | | | | | | | 2 | | | | | | | | | | | | | | 1 | 1 2.0 | |
| Pancreatic, Pigmentation | | | | | | | | 3 | | | | | | | | | | | | | | 1 | 1 3.0 | |
| Lymph Node, Mandibular | M | + | M | + | M | + | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | 4 | | |
| Hyperplasia, Lymphoid | 2 | | 1 | | 1 | | 2 | | | | | | | | | | | | | | | | 4 1.5 | |
| Pigmentation | | | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Atrophy | 2 | 2 | 1 | | | | 1 | | 1 | | | | | | | | | | | | | | 1 3.0 | |
| Hemorrhage | | | | | | | 1 | | | | | | | | | | | | | | | 1 | 9 1.7 | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | 5 | 1.6 | |
| Spleen | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Ectopic Spleen, Multiple | 1 | | | | | 1 | 2 | 1 | | 1 | 4 | 1 | 3 | | X | | | | | | | | 1 | |
| Hematopoietic Cell Proliferation | 1 | 1 | 1 | | | 1 | | | 1 | | | | | | | 4 | | 1 | 1 | 1 | 1 | 1 | 31 1.6 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | |
| Pigmentation | 2 | 3 | 3 | | 3 | 3 | | 3 | 2 | 3 | | 3 | 2 | | | | 2 | 3 | 4 | 3 | 3 | 4 | 20 2.6 | |
| Lymphoid Follicle, Atrophy | | | | | | | | | 2 | | | | | | | | | | | | | 3 1.7 | | |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 3 1.0 | | |
| Thymus | + | + | + | + | + | + | + | + | | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | |

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TDMS No. 99037 - 05

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Lab: SRI

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ANIMAL ID | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|---------------------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
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9
8 | * TOTALS |
| | Cyst | | | | | | | | | | | | | | X | | | | | | | 2 | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 21 |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | 2.3 |
| Duct, Ectasia | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperkeratosis | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | 2.0 |
| Epidermis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 45 |
| | | | | | | | | | | | | | | | | | | | | | | 2.4 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Femur, Osteopetrosis | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | 2.0 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Compression | | | | | | | | | | | | | | | | | | | | | | 10 |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | 3 |
| | | | | | | | | | | | | | | | | | | | | | | 1.0 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 |
| Infiltration Cellular, Histiocyte | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | 43 |
| | | | | | | | | | | | | | | | | | | | | | | 1.0 |
| | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | 2.0 |

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|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------|----------|
| | | 0
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1 | 0
7
3
1 | 0
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8 | 0
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2 | 0
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1 | 0
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7
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1 | 0
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2
2 | X | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | 1 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Mineralization | | 1
1 | | 1
1 | 1
1 | 24 1.0 |
| Nephropathy | | 1
1 | | 1
1 | 1
1 | 36 1.0 |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | 5 2.0 |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thyione mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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M .. Missing tissue

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TDMS No. 99037 - 05

Test Type: CHRONIC

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Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

CARDIOVASCULAR SYSTEM

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grad

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

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Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | | | | | | | | |
|-----------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------------|---|---|---|---|--|--|--|--|--|--|
| | | 05 | 07 | 07 | 04 | 06 | 07 | 04 | 02 | 07 | 06 | 07 | 06 | 02 | 06 | 05 | 07 | 05 | 01 | 07 | 06 | 05 | 04 | 07 | 07 | 05 | | | | | | | | | | |
| 25 MG/KG | ANIMAL ID | 09 | 20 | 03 | 11 | 22 | 85 | 37 | 11 | 11 | 11 | 11 | 57 | 71 | 11 | 11 | 57 | 71 | 29 | 03 | 29 | 70 | 00 | 96 | 12 | 11 | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | | | | | | | | | | |
| Accessory Adrenal Cortical Nodule | | 1 | | | | | | | | | | | | | | 2 | | | | | | | 1 | 3 | 1 | | | | | | | | | | | |
| Degeneration, Fatty | | 1 | 4 | | 1 | | | | | | | | | | | | | | | | | | 1 | 2 | 2 | | 1 | | | | | | | | | |
| Hematopoietic Cell Proliferation | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | | | | |
| Hyperplasia | | 4 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | |
| Parathyroid Gland | | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | | | | |
| Pituitary Gland | | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | | | | |
| Pigmentation | | 2 | 1 | 1 | | | | | | | | | | | | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | X | X | | | | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia, Focal | | 2 | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Intermedia, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rathke's Cleft, Dilatation | | 1 | | 1 | | | | 1 | | 1 | | | | | | X | | 1 | | 1 | | 2 | | | | | | | | | | | | | | |
| Thyroid Gland | | + | + | + | + | + | A | + | + | + | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultimobranchial Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAE

Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

INTEGUMENTARY SYSTEM

+ +
 1 3 3
 Mammary Gland Hyperplasia Malformation

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: SRI

| | | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|-----------------------------------|--|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|--|----------------------|--|
| | | 25 MG/KG | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
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9 | 0
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5
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8 | 0
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0
1 | | | | |
| | | 2
1 | 2
2 | 3
3 | 1
3 | 2
3 | 2
3 | 2
8 | 1
9 | 3
0 | 1
1 | 1
2 | 1
3 | 1
4 | 1
5 | 1
6 | 1
7 | 1
8 | 1
9 | 0
0 | 1
2 | 2
2 | 2
3 | 2
4 | | | |
| Duct, Ectasia | | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | | | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Cyst Epithelial Inclusion | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperkeratosis | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Compression | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gliosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|----------|
| | | 0
3
9
0 | 0
7
3
1 | 0
7
3
1 | 0
5
4
7 | 0
6
5
2 | 0
6
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7 | 0
1
7
9 | 0
7
2
9 | 0
3
9
4 | 0
4
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9 | 0
7
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9 | 0
7
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4
8 | 0
4
8
8 | 0
7
9
4 | 0
4
8
8 | 0
7
9
4 | 0
7
9
4 | | |
| 25 MG/KG | ANIMAL ID | 0
0
3
2
6 | 0
0
3
2
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0
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2
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3
3
0 | 0
0
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0
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4 | 0
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3
4
5 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A A + | 39 |
| Intestine Large, Colon | A | + | + | + | + | + | + | A | A | + | + | A | + | + | + | A | + | + | + | A A + | 33 | |
| Intestine Large, Rectum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A A + | 41 | |
| Intestine Small, Duodenum
Necrosis | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | A A + | 40 | |
| Intestine Small, Ileum | A | + | + | + | + | + | + | A | A | + | A | + | + | + | + | A | + | + | + | A A + | 1 1.0 | |
| Intestine Small, Jejunum | A | + | + | + | + | + | + | A | A | + | A | + | + | + | + | A | + | + | + | A A + | 33 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Angiectasis | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X X X | 1 2.0 | |
| Basophilic Focus | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X X X | 40 | |
| Clear Cell Focus | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X X X | 11 | |
| Eosinophilic Focus | X | | | | | | | | | | | | | | | | | | | | 2 | |
| Hematopoietic Cell Proliferation | X | | | | | | | | | | | | | | | | | | | | | 4 1.0 |
| Hepatodiaphragmatic Nodule | X | | | | | | | | | | | | | | | | | | | | | 6 |
| Infiltration Cellular, Mixed Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 32 1.1 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | | 4 |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | 5 1.4 |
| Artery, Inflammation | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Bile Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 7 2.0 |
| | 2 | | | | | | | | | | | | | | | | | | | | | 3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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alpha/beta Thujone mixture

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------|
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| 25 MG/KG | ANIMAL ID | 0
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6 | 0
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3
7 | 0
0
0
3
3
8 | |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | | | 3 3.3 | |
| Hepatocyte, Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | 3 2.7 | |
| Kupffer Cell, Pigmentation | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | 9 | |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | 2 | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | 8 2.1 | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | 2 | 1 | 1 | 1 | 1 | 1 | 2 | | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 1.2 |
| Cyst | | X | X | X | X | X | X | | | | | | | | | | | | | | 9 | |
| Acinus, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | 5 1.0 | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | 2 2.0 | |
| Epithelium, Hyperplasia, Atypical | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Erosion | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | 3 2.3 | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | 1 | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 1.2 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| * .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade | | | | | | | | | | | | | | | | | | | | | | |
| + .. Tissue examined microscopically | | | | | | | | | | | | | | | | | | | | | | |
| X .. Lesion present | | | | | | | | | | | | | | | | | | | | | | |
| I .. Insufficient tissue | | | | | | | | | | | | | | | | | | | | | | |
| M .. Missing tissue | | | | | | | | | | | | | | | | | | | | | | |
| A .. Autolysis precludes evaluation | | | | | | | | | | | | | | | | | | | | | | |
| BLANK .. Not examined microscopically | | | | | | | | | | | | | | | | | | | | | | |
| 1-4 .. Lesion qualified as: | | | | | | | | | | | | | | | | | | | | | | |
| 1) Minimal 3) Moderate | | | | | | | | | | | | | | | | | | | | | | |
| 2) Mild 4) Marked | | | | | | | | | | | | | | | | | | | | | | |

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-----------------------------------|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------|--------|----------|--------|
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| 25 MG/KG | ANIMAL ID | 0
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8 | 0
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0 | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | | |
| Accessory Adrenal Cortical Nodule | | 1
1 | 1
1 | | | 1
1 | 1
2 | 1
1 | 1
2 | 1
3 | 1
1 | 1
2 | 1
3 | 1
1 | 1
1 | 1
1 | 1
1 | 13 1.3 | |
| Degeneration, Fatty | | | | 2 | 2 | 1
1 | 1
1 | | 1
2 | 3 | 1
1 | 1
2 | 3 | | | | | 19 1.7 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 1.6 |
| Hypertrophy, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.7 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Parathyroid Gland | | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 1.4 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 2.2 |
| Pars Distalis, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Pars Distalis, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 |
| Pars Distalis, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pars Distalis, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.5 |
| Pars Intermedia, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Rathke's Cleft, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 1.2 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | 44 | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 1.6 |
| Ultimobranchial Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

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Species/Strain: RATS/F 344/N

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alpha/beta Thujone mixture

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Date Report Requested: 08/18/2010

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

* - Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

± .. Tissue examined microscopically

M .. Missing tissue

X., Lesion present

I .. Insufficient tissue

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 25 MG/KG | ANIMAL ID | 3 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 5 | 7 | 6 | 6 | 1 | 7 | 7 | 3 | 9 | 4 | 7 | 7 | 6 | 4 | 7 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mediastinal, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Mediastinal, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pancreatic, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Pancreatic, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Lymph Node, Mandibular | | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | 47 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 6 1.7 |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.5 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Hematopoietic Cell Proliferation | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 21 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.3 |
| Pigmentation | | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 39 2.9 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Lymphoid Follicle, Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 10 1.6 |
| Malformation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----|-----|
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| 25 MG/KG | ANIMAL ID | 0
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4
8 | 0
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9 | | |
| Duct, Ectasia | | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 39 | 1.9 | | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Cyst Epithelial Inclusion | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Hyperkeratosis | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Compression | | | | | | | | | | | | | | | | | | | | | | | 6 | | |
| Gliosis | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | 3 | 2.7 | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | 5 | 1.2 | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Infiltration Cellular, Histiocyte | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | + | + | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 36 | 1.1 | |
| Inflammation, Chronic | | | | | | | | | 1 | | | | | | | | | | | | | | 5 | 1.0 | |
| Metaplasia, Osseous | | | | | | | | | 2 | | | | | | | | | | | | | | 2 | 1.5 | |
| Alveolar Epithelium, Hyperplasia | | 1 | | 1 | 1 | 1 | | | 1 | 3 | 2 | 1 | | | | | | | | | | 3 | 17 | 1.3 | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Foreign Body | | 1 | | | | | | | | | | | | | | | | | | | | | 2 | 3 | 1.3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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| 25 MG/KG | ANIMAL ID | 0
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9 |
| | | 2
2 | 1 | | | | | | | | | | | | | | | | | | | 2
1 | 2 | 9
1.4
2
1.5 |
| Inflammation, Chronic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | 41 |
| Cataract | | | | | | | | | | | | | | | | | | | 2 | 4 | | | | 3.0 |
| Edema | | | | | | | | | | | | | | | | | | | 4 | 1 | | | | 2.5 |
| Bilateral, Cataract | | | | | | | | | | | | | | | | | | | 2 | | | | | 2.0 |
| Retina, Degeneration | | | | | | | | | | | | | | | | | | | 4 | 1 | | | | 2.5 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | 49 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | 2 | | | | | 2.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | 4 | 1 | | | | 3.0 |
| Inflammation, Chronic | 1 | | | | | | | | | | | | | | | | | 2 | | | | | 2 | 1.3 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | A | + | A | + | A | 40 | |
| Casts Protein | 1 | 2 | | | | | | | 1 | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 12
1.3 |
| Infarct | | 4 | | | | | | | | | | | | | | | | | | | | | | 4.0 |
| Inflammation, Chronic | | 3 | | | | | | | | | | | | | | | | | | | | | | 2.0 |
| Mineralization | 1 | 2 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | 17
1.2 |
| Nephropathy | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | 26
1.0 |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | 3 | | | | | | 4
2.8 |
| Renal Tubule, Necrosis | | | | | | | | | | | | | | | | | | | 3 | | | | | 1
1.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|----------------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females
(cont...) |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

Esophagus

Intestine Large, Cecum

Intestine Large, Colon

Intestine Large, Rectum
HemorrhageIntestine Small, Duodenum
Necrosis, Lymphoid

Intestine Small, Ileum

Intestine Small, Jejunum
Necrosis, Lymphoid

Liver

Basophilic Focus

Hepatodiaphragmatic Nodule

Infiltration Cellular, Histiocyte

Infiltration Cellular, Mixed Cell

Necrosis, Focal

Mesentery

Accessory Spleen

Necrosis

Fat, Necrosis

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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TDMS No. 99037 - 05

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | | |
| | + | | + | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cardiomyopathy | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Accessory Adrenal Cortical Nodule | | | | | | | | | | | | | | | | | | | | | | | | | |
| Degeneration, Fatty | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hemorrhage | | 2 | | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| Hypertrophy, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Parathyroid Gland | | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Angiectasis | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | |
| Pars Distalis, Atrophy | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | | | | | X | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia, Focal | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | |
| Pars Intermedia, Cyst | | | | | | | | | | | | | X | | | | | | | | | | | | | | |
| Rathke's Cleft, Dilatation | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ectopic Thymus | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultimobranchial Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Lymphocyte | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Iliac, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Iliac, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Iliac, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Mediastinal, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Mediastinal, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Pancreatic, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Pancreatic, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Lymph Node, Mandibular | | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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| FISCHER 344 RATS FEMALE | DAY ON TEST | females
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------------|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Infiltration Cellular, Histiocyte | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nasolacrimal Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Retina, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

Inflammation, Chronic

females (cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 3 | 3 | 7 | 9 | |
| | | 5 | 7 | 0 | 4 | 3 | 1 | 0 | 5 | 8 | 8 | 4 | 7 | 3 | 8 | 4 | 9 | 0 | 2 | 9 | 6 | 3 | 5 | 0 | 7 | 9 | |
| 6 | | 6 | 7 | 2 | 3 | 9 | 0 | 6 | 3 | 7 | 3 | 4 | 1 | 4 | 7 | 8 | 9 | 4 | 9 | 0 | 3 | 5 | 0 | 7 | 3 | 8 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| 7 | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

* TOTALS

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Intestine Large, Colon | A | A | + | A | + | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | 25 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Hemorrhage | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Intestine Small, Duodenum | + | + | A | + | + | + | + | A | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 47 | |
| Necrosis, Lymphoid | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 1.0 | |
| Intestine Small, Ileum | M | + | A | A | + | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | 29 | |
| Intestine Small, Jejunum | + | A | A | A | + | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | 31 | |
| Necrosis, Lymphoid | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 1.0 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basophilic Focus | X | | | X | | | | X | | | | | | | | | | X | X | X | | | | | | 12 | |
| Hepatodiaphragmatic Nodule | X | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Infiltration Cellular, Mixed Cell | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 1 | 2 | 4 1.5 | |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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alpha/beta Thujone mixture

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------------------------|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------|
| | | 0
1
5
6 | 0
1
4
7 | 0
1
3
2 | 0
5
0
6 | 0
0
8
3 | 0
0
8
7 | 0
0
4
1 | 0
1
3
4 | 0
0
8
7 | 0
0
4
8 | 0
1
8
9 | 0
0
2
0 | 0
1
9
0 | 0
2
3
5 | 0
1
3
0 | 0
1
7
7 | 0
0
5
8 | 0
1
9
9 | 0
0
5
9 | | |
| 50 MG/KG | ANIMAL ID | 0
0
0
0
3
7
6 | 0
0
0
0
3
7
7 | 0
0
0
0
3
8
8 | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | 5 1.2 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | 3 |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | 8 1.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Artery, Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Accessory Adrenal Cortical Nodule | | 2 | 1 | 1 | | | | | | | | | | | | | | | | | | 9 1.3 |
| Degeneration, Fatty | | 1 | 2 | | | | | | | | | | | | | | | | | | | 9 1.3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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alpha/beta Thujone mixture

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First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----------|----|--------|-------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| 50 MG/KG | ANIMAL ID | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 3 | 7 | * TOTALS | | | | |
| | | 5 | 7 | 0 | 4 | 3 | 1 | 0 | 5 | 8 | 8 | 4 | 7 | 3 | 8 | 4 | 9 | 0 | 1 | 6 | 3 | 5 | 9 | | | | |
| | | 6 | 7 | 2 | 3 | 9 | 0 | 6 | 3 | 7 | 3 | 4 | 1 | 4 | 7 | 8 | 9 | 4 | 0 | 3 | 5 | 0 | 7 | 3 | 8 | 9 | 9 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 3 2.7 | |
| Hyperplasia, Focal | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Hypertrophy, Focal | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 2.5 | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Parathyroid Gland | | + | + | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | M | + | + | + | + | 45 | | | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | 48 | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | 1 | | | | | | | | 2 1.0 | | |
| Pars Distalis, Atrophy | | | | | | | | | | | | | | | | | 1 | | | | | | | | 12 2.3 | | |
| Pars Distalis, Cyst | | | | | | | | | | | | | | | | | X | X | | | | | | | 8 | | |
| Pars Distalis, Hyperplasia, Focal | | | | | | | | | | | | | | | | | 3 | 3 | 1 | 1 | 4 | | | | 1 2.0 | | |
| Pars Intermedia, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Rathke's Cleft, Dilatation | | | | | | | | | | | | | | | | | 1 | | | | | | | | 26 1.3 | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Ectopic Thymus | | | | | | | | | | | | | | | | | 2 | | | | | | | | 1 2.0 | | |
| Ultimobranchial Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----------|----------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 50 MG/KG | ANIMAL ID | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 3 | 3 | 7 | 9 | 5 | 9 | * TOTALS | |
| | | 5 | 7 | 0 | 4 | 3 | 1 | 0 | 5 | 8 | 3 | 4 | 7 | 3 | 8 | 4 | 9 | 0 | 2 | 1 | 1 | 2 | 3 | 3 | 7 | 9 | 5 | 9 | |
| | | 6 | 7 | 2 | 3 | 9 | 0 | 6 | 3 | 7 | 3 | 4 | 1 | 4 | 7 | 8 | 9 | 4 | 9 | 0 | 3 | 5 | 0 | 7 | 3 | 8 | 9 | 9 | * TOTALS |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | * TOTALS |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Lymphocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 2.2 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.8 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Lymph Node | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Iliac, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Iliac, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Iliac, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mediastinal, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Mediastinal, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pancreatic, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pancreatic, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 2.3 |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Lymph Node, Mandibular | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | + | M | + | M | M | M | M | M | M | M | M | 4 | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------|----------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 MG/KG | ANIMAL ID | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 3 | 3 | 7 | 9 | 5 | 9 | * TOTALS |
| | | 5 | 7 | 0 | 4 | 3 | 1 | 0 | 5 | 8 | 8 | 4 | 7 | 3 | 8 | 4 | 9 | 0 | 2 | 9 | 6 | 3 | 5 | 0 | 7 | 3 | 8 | 9 | |
| Lymph Node, Mesenteric | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| Hemorrhage | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 1.7 |
| Hyperplasia, Lymphoid | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 1.6 |
| Necrosis | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 0 |
| Spleen | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 2 2 1 2 |
| Necrosis | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 9 | 0 | 1 2.0 |
| Pigmentation | | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 45 2.4 | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 | |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 2.0 | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.7 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pigmentation | | 1 | 1 | 2 | | 2 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | 19 1.3 | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 99037 - 05

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

alpha/beta Thujone mixture

CAS Number: THUJONEMIXAB

Date Report Requested: 08/18/2010

Time Report Requested: 08:56:05

First Dose M/F: 06/09/03 / 06/09/03

Lab: SRI

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|-----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 0
1
5
6 | 0
1
4
7 | 0
1
3
2 | 0
1
1
3 | 0
0
8
6 | 0
1
5
0 | 0
0
8
6 | 0
1
3
4 | 0
1
8
7 | 0
2
8
9 | 0
0
4 | 0
1
9
9 | 0
1
6
0 | 0
2
3
3 | 0
1
3
0 | 0
1
7
7 | 0
0
5
8 | 0
1
9
8 | 0
1
5
9 | 0
1
9
8 | 0
1
5
9 | | | |
| 50 MG/KG | ANIMAL ID | 0
0
3
7
6 | 0
0
3
7
7 | 0
0
3
7
8 | 0
0
3
8
9 | 0
0
3
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0 | 0
0
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1 | 0
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2 | 0
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3 | 0
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4 | 0
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5 | 0
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0
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9
4 | 0
0
3
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5 | 0
0
3
9
6 | 0
0
3
9
7 | 0
0
3
9
8 | 0
0
3
9
9 |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | 8 1.0 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Nasolacrimal Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Retina, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 6 1.5 | |
| X | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Mineralization | | | 1 | 1 | | 1 | 1 | | 1 | | | | | | | | | | | | | | | 8 1.0 | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

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X .. Lesion present

I .. Insufficient tissue

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| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | |
| | | 50 MG/KG | | | | | | | | | | | | | | | | | | | | | |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 1 | 0 |
| 5 | 7 | 0 | 4 | 3 | 1 | 0 | 5 | 8 | 8 | 4 | 7 | 3 | 8 | 4 | 8 | 0 | 9 | 6 | 3 | 3 | 7 | 9 | 5 |
| 6 | 7 | 2 | 3 | 9 | 0 | 6 | 3 | 7 | 3 | 4 | 1 | 4 | 7 | 8 | 9 | 4 | 0 | 3 | 5 | 0 | 7 | 3 | 9 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1.0 | | | | | | | | | | | | | | | | | | | | | | | |

*** END OF REPORT ***

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