

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

F1_RD

C Number: C20307

Lock Date: 12/23/2009

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 2.4.2.1_003

PWG Approval Date: NONE

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Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

untreated

ANIMAL ID

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

*** TOTALS****ALIMENTARY SYSTEM**

Esophagus

Intestine Large, Cecum

Intestine Large, Colon

Intestine Large, Rectum

Intestine Small, Duodenum

Intestine Small, Ileum

Intestine Small, Jejunum

Liver
Inflammation, Chronic

Oral Mucosa

Pancreas

Salivary Glands

Stomach, Forestomach

Stomach, Glandular

Tongue

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
2											1 2.0

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

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M .. Missing tissue

X .. Lesion present

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untreated

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

* TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10
					1						
					2						

Heart

Cardiomyopathy

Inflammation, Chronic

1 1.0

1 2.0

ENDOCRINE SYSTEM

Adrenal Cortex

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10

Adrenal Medulla

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10

Parathyroid Gland

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10

Pituitary Gland

	+	+	+	+	+	+	+	+	+	+	9
	+	+	+	+	+	+	+	+	+	+	9

Thyroid Gland

+	+	+	+	+	+	+	+	+	+	+	10
+	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	M	+	+	+	+	+	+	9
Inflammation, Chronic	1	1									2 1.0

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untreated

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

*** TOTALS**

Prostate

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Seminal Vesicle

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Testes

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

HEMATOPOIETIC SYSTEM

Bone Marrow

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mandibular

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mesenteric
Infiltration Cellular, Histiocyte

+	+	+	+	+	+	+	+	+	+	+	10
					2						1 2.0

Spleen

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Thymus

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

INTEGUMENTARY SYSTEM

Mammary Gland

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Skin

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Skin, Site Of Application

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

MUSCULOSKELETAL SYSTEM

Bone

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

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untreated

ANIMAL ID

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

* TOTALS

NERVOUS SYSTEM

Brain

+ + + + + + + + + +

10

RESPIRATORY SYSTEM

Larynx

+ + + + + + + + + +

10

Inflammation, Neutrophil

2

1 2.0

Lung

+ + + + + + + + + +

10

Hemorrhage

3

1 3.0

Inflammation, Chronic

2

4 2.3

Interstitial, Inflammation, Focal

1

2 1.0

Nose

+ + + + + + + + + +

10

Trachea

+ + + + + + + + + +

10

SPECIAL SENSES SYSTEM

Eye

+ + + + + + + + + +

10

Harderian Gland

+ + + + + + + + + +

10

URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

Nephropathy

2

10 1.4

Renal Tubule, Casts

1

3 1.0

Urinary Bladder

+ + + + + + + + + +

10

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FISCHER 344-TACONIC RATS MALE

vehicle

ANIMAL ID

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

*** TOTALS****ALIMENTARY SYSTEM**

Esophagus

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Large, Cecum

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Large, Colon

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Large, Rectum

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Small, Duodenum

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Small, Ileum

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Intestine Small, Jejunum

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Liver

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Oral Mucosa

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Pancreas

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Acinus, Atrophy

											2
--	--	--	--	--	--	--	--	--	--	--	---

1 2.0

Salivary Glands

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Stomach, Forestomach

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Stomach, Glandular

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Tongue

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

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DAY ON TEST

FISCHER 344-TACONIC RATS MALE

vehicle

ANIMAL ID

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

* TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Heart

Cardiomyopathy

+	+	+	+	+	+	+	+	+	+	+	10
1											1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Adrenal Medulla

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Parathyroid Gland

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Pituitary Gland

+	I	+	I	+	+	+	+	+	+	+	8
---	---	---	---	---	---	---	---	---	---	---	---

Thyroid Gland

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Preputial Gland

+	+	+	+	+	M	M	+	+	+		8
---	---	---	---	---	---	---	---	---	---	--	---

Prostate

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

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

*** TOTALS**

Seminal Vesicle

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Testes

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

HEMATOPOIETIC SYSTEM

Bone Marrow

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mandibular

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mesenteric
Infiltration Cellular, Histiocyte

+	+	+	+	+	+	+	+	+	+	+	10
											1 2.0

Spleen

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Thymus

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

INTEGUMENTARY SYSTEM

Mammary Gland

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Skin

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

Skin, Site Of Application

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

MUSCULOSKELETAL SYSTEM

Bone

+	+	+	+	+	+	+	+	+	+	+	10
---	---	---	---	---	---	---	---	---	---	---	----

NERVOUS SYSTEM

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	DAY ON TEST											* TOTALS
		0 0 9 2										
FISCHER 344-TACONIC RATS MALE	vehicle	ANIMAL ID										
		0 0 0 1 1	0 0 0 1 2	0 0 0 1 3	0 0 0 1 4	0 0 0 1 5	0 0 0 1 6	0 0 0 1 7	0 0 0 1 8	0 0 0 1 9	0 0 0 1 0	
Brain		+ + + + + + + + + +										10
RESPIRATORY SYSTEM												
Larynx		+ + + + + + + + + +										10
Lung		+ + + + + + + + + +										10
Inflammation, Chronic												
Interstitial, Inflammation, Focal		3		2		3	3		2			5 2.6
						1						1 1.0
Nose		+ + + + + + + + + +										10
Trachea		+ + + + + + + + + +										10
SPECIAL SENSES SYSTEM												
Eye		+ + + + + + + + + +										10
Harderian Gland		+ + + + + + + + + +										10
URINARY SYSTEM												
Kidney		+ + + + + + + + + +										10
Nephropathy		1 1 1 1				1	1 1 1 1					8 1.0
Urinary Bladder		+ + + + + + + + + +										10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

FISCHER 344-TACONIC RATS MALE	6.25%	DAY ON TEST														
			0 0 9 2													
			* TOTALS													
			0 0 9 2													

ALIMENTARY SYSTEM

Liver

+ + + + + + + + + +

10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

Control, Hyperplasia
Control, Inflammation

+ + + + + + + + + +

10

1 1.0

1 1.0

Skin, Site Of Application
Hyperkeratosis+ + + + + + + + + +
1

10

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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

6.25%

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

* TOTALS

Hyperplasia

1 1

2 1.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

Nephropathy

2 2 2 1 2 2 2 1 1

9 1.7

Renal Tubule, Casts

1

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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

FISCHER 344-TACONIC RATS MALE 12.5%	DAY ON TEST ANIMAL ID										
		0 0 9 2									
		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

* TOTALS

ALIMENTARY SYSTEM

Liver + + + + + + + + + +

10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin	+ + + + + + + + + +	10
Skin, Site Of Application	+ + + + + + + + + +	10
Hyperkeratosis	1 1	3 1.0
Hyperplasia	1 1	4 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

12.5%

ANIMAL ID

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

* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Nephropathy

Renal Tubule, Casts

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

10

10 1.9

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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

FISCHER 344-TACONIC RATS MALE	25%	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		
			9	9	9	9	9	9	9	9	9	9	9	9		
			2	2	2	2	2	2	2	2	2	2	2	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		
			4	4	4	4	4	4	4	4	4	4	4	5		
			1	2	3	4	5	6	7	8	9	9	0	0		
* TOTALS																

ALIMENTARY SYSTEM

Liver

+ + + + + + + + + +

10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

+ + + + + + + + + +

10

Skin, Site Of Application

+ + + + + + + + + +

10

Hyperkeratosis

1 1 1 1 1 1 1 1

4 1.0

Hyperplasia

1 1 1 1 1 1 1 1

5 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

25%

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

* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEMKidney
Nephropathy

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

10
10 1.4

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

		DAY ON TEST																							
		FISCHER 344-TACONIC RATS MALE																							
		50%																							
		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	0	0
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
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	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	0	0	0	0
0	0	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6
1	2	3	4	5	6	7	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* TOTALS

ALIMENTARY SYSTEM

Liver

+ + + + + + + + + +

10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

+ + + + + + + + + +

10

Skin, Site Of Application

+ + + + + + + + + +

10

Hyperkeratosis

1 1 1 1 1

5 1.0

Hyperplasia

2 2 2 2 1 1 1 1

8 1.5

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

50%

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

* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

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

10

Nephropathy

Renal Tubule, Casts

10 1.7

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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE

100%

ANIMAL ID

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

* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Oral Mucosa	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10
Tongue	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE**100%**

ANIMAL ID

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

*** TOTALS**

Blood Vessel

+ + + M + + + + + + 9

Heart

+ + + + + + + + + + 10

Cardiomyopathy

1 1.0

Infiltration Cellular, Histiocyte, Focal

1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex

+ + + + + + + + + + 10

Adrenal Medulla

+ + + + + + + + + + 10

Parathyroid Gland

+ + + + + + + + + + 10

Pituitary Gland

+ + + + + + + + | + 9

Thyroid Gland

+ + + + + + + + + + 10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+ + + + + + + + + + 10

Preputial Gland

+ M + + + + + + + + 9

Inflammation, Chronic

1 1.0

Prostate

+ + + + + + + + + + 10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE**100%**

ANIMAL ID

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

*** TOTALS**

Seminal Vesicle

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Testes

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

HEMATOPOIETIC SYSTEM

Bone Marrow

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Lymph Node

Mediastinal, Hyperplasia, Lymphoid, Diffuse

| | | | |
|---|---|---|-------|
| + | 3 | 1 | 1 3.0 |
|---|---|---|-------|

Lymph Node, Mandibular

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Lymph Node, Mesenteric

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Spleen

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Thymus

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

INTEGUMENTARY SYSTEM

Mammary Gland

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin, Site Of Application

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Hyperkeratosis

| | | | | | | | | |
|---|---|---|---|---|---|---|---|-------|
| 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 8 1.1 |
|---|---|---|---|---|---|---|---|-------|

Hyperplasia

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|--------|
| 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 10 1.3 |
|---|---|---|---|---|---|---|---|---|--------|

Inflammation

| | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|-------|
| 1 | | | | | | | | | 1 1.0 |
|---|--|--|--|--|--|--|--|--|-------|

MUSCULOSKELETAL 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

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

FISCHER 344-TACONIC RATS MALE**100%**

ANIMAL ID

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

*** TOTALS**

Bone

+ + + + + + + + + + 10

NERVOUS SYSTEM

Brain

+ + + + + + + + + + 10

RESPIRATORY SYSTEM

Larynx

+ + + + + + + + + + 10

Lung

+ + + + + + + + + + 10

Infiltration Cellular, Histiocyte

1 2.0

Inflammation, Chronic

5 2.2

Nose

+ + + + + + + + + + 10

Trachea

+ + + + + + + + + + 10

SPECIAL SENSES SYSTEM

Eye

+ + + + + + + + + + 10

Harderian Gland

+ + + + + + + + + + 10

URINARY SYSTEM

Kidney

+ + + + + + + + + + 10

Nephropathy

10 1.9

Urinary Bladder

+ + + + + + + + + + 10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

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Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

*** END OF MALE DATA ***

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

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Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

ALIMENTARY SYSTEM

| | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | 2 | 3 | 2 | 2 | 1 | | 2 | | | | 6 2.0 |
| Oral Mucosa | + | + | + | + | + | + | + | + | + | + | 10 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Tongue | + | + | + | + | + | + | + | + | + | + | 10 |

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

**FISCHER 344-TACONIC RATS
FEMALE**

untreated

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

* TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel

+ + + M + + + + + 9

Heart

+ + + + + + + + + 10

ENDOCRINE SYSTEM

Adrenal Cortex

+ + + + + + + + + 10

Adrenal Medulla

+ + + + + + + + + 10

Parathyroid Gland

+ + + M + + + + + 9

Pituitary Gland

Pars Distalis, Cyst, Multiple, Focal

I I I + + + + + + 7

1 1.0

Thyroid Gland

+ + + + + + + + + 10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+ + + M + + + + + 9

Ovary

+ + + + + + + + + 10

Uterus

+ + + + + + + + + 10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE**

untreated

ANIMAL ID

HEMATOPOIETIC SYSTEM

Bone Marrow

Lymph Node, Mandibular

Lymph Node, Mesenteric
Infiltration Cellular, Histiocyte

Spleen

Thymus

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | M | + | + | + | + | + | | 9 |
| | | | | 1 | | 1 | 2 | 1 | | | 4 1.3 |
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | 10 |

INTEGUMENTARY SYSTEM

Mammary Gland

Skin

Skin, Site Of Application

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|--|----|
| + | + | + | + | + | + | + | + | M | M | | 8 |
| + | + | + | + | + | + | + | + | + | + | | 10 |
| + | + | + | + | + | + | + | + | + | + | | 10 |

MUSCULOSKELETAL SYSTEM

Bone

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS SYSTEM

Brain

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

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. 20307 - 03

Test Type: 90-DAY

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 07/27/2011

Route: SKIN APPLICATION

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

Time Report Requested: 12:19:40

Species/Strain: RATS/F344/N Tac

CAS Number: 54464-57-2

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

| FISCHER 344-TACONIC RATS
FEMALE
untreated | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | * TOTALS |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | | 0
0
9
2 | |
| Larynx | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | 2 | | | 1 | | | | | | | 2 1.5 |
| Interstitial, Inflammation, Focal | | 2 | 1 | | | | | 1 | | | | | | 3 1.3 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | |
| Ear | | | | | | | | | | | | | | 1 |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | 1 | | | 2 | | | 1 | | | | 3 1.3 |
| URINARY SYSTEM | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Nephropathy | | | | | | | 1 | | | 1 | | | | 2 1.0 |
| Urinary Bladder | | + | + | + | + | + | I | + | + | + | + | + | + | 9 |

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

FISCHER 344-TACONIC RATS

FEMALE

vehicle

ANIMAL ID

ALIMENTARY SYSTEM

| | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | 2 | 1 | 1 | 2 | 1 | | | 5 1.4 |
| Oral Mucosa | + | + | + | + | + | + | + | + | + | + | 10 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Tongue | + | + | + | + | + | + | + | + | + | + | 10 |

* .. 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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2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

**FISCHER 344-TACONIC RATS
FEMALE**

vehicle

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

* TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | | | | | | | | | | | | 1 1.0 |

ENDOCRINE SYSTEM

Adrenal Cortex

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | + | + | + | | | | | | | | + | 4 |
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEMClitoral Gland
Inflammation, Chronic

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | | | | | | | | | | | | 1 1.0 |
| + | + | + | + | + | + | + | + | + | + | + | + | 10 |

* .. 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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2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

+ .. Tissue examined microscopically

X .. Lesion present

| .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

NERVOUS SYSTEM

Brain + + + + + + + + + + + **10**

RESPIRATORY SYSTEM

| | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | | | | 1 | 3 | 2 | | | 3 2.0 |
| Mineralization | | | | | | | | 1 | | | | 1 1.0 |
| Interstitial, Inflammation, Focal | | | | | | | 1 | | | | | 1 1.0 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | | 1 | | | | | | | | 1 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | 1 | | | | | | | 1 | 2 1.0 |
| Mineralization | | | | | | | | | | | 1 | 1 1.0 |
| Nephropathy | | | | | | | 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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

Urinary Bladder

+ + M + + + + + + +

9

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE****6.25%**

ANIMAL ID

ALIMENTARY SYSTEMLiver
Inflammation, Chronic+ + + + + + + + + +
1 1 1 1 1 3 2 2 210
7 1.6**CARDIOVASCULAR SYSTEM**

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEMSkin
Skin, Site Of Application
Hyperplasia+ + + + + + + + + +
+ + + + + + + + + +
110
10
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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE**

6.25%

ANIMAL ID

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE****12.5%**

ANIMAL ID

ALIMENTARY SYSTEMLiver
Inflammation, Chronic

| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.0 |

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin, Site Of Application
Hyperkeratosis

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| | | | | | | | | | | | 4 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

| FISCHER 344-TACONIC RATS
FEMALE
12.5% | DAY ON TEST
ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|--------------------------|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 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 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| * TOTALS | | | | | | | | | | | |
| Hyperplasia | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 1.0 | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

+ + + + + + + + + + +

10

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE****25%**

ANIMAL ID

ALIMENTARY SYSTEMLiver
Inflammation, Chronic

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 1 | | | | | | 2 | 2 | 1 | | | 5 1.4 |

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin, Site Of Application
Hyperkeratosis

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 1 | | 2 | 1 | | 2 | | 1 | | | | 5 1.4 |

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

| FISCHER 344-TACONIC RATS
FEMALE
25% | DAY ON TEST
ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|--------------------------|---|---|---|---|---|---|---|---|---|-------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 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 | 2 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| * TOTALS | | | | | | | | | | | |
| Hyperplasia | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | | |
| | | | | | | | | | | | 7 1.3 |

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

| | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | | | | | | | | | | | 1 1.0 |
| Mineralization | 1 | | | | | | | | | | 2 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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

**FISCHER 344-TACONIC RATS
FEMALE****50%**

ANIMAL ID

ALIMENTARY SYSTEMLiver
Inflammation, Chronic

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 2 | | 1 | | | 1 | | 2 | 1 | | | 5 1.4 |

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin, Site Of Application
Hyperkeratosis

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 1 | 1 | 1 | 1 | 2 | | 2 | | 1 | | | 7 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

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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

**FISCHER 344-TACONIC RATS
FEMALE**

50%

ANIMAL ID

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

*** TOTALS**

Hyperplasia

1 1 2 1 2 2 2 1

7 1.4

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Pelvis, Inflammation, Chronic

+ + + + + + + + + +

10

2

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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

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

* TOTALS

ALIMENTARY SYSTEM

| | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | 10 |
| | 1 | 1 | 1 | 1 | 2 | | 2 | | | | 5 1.4 |
| Oral Mucosa | + | + | + | + | + | + | + | + | + | + | 10 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Tongue | + | + | + | + | + | + | + | + | + | + | 10 |

* .. 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. 20307 - 03

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphthalenyl)- (Iso-E Super)

CAS Number: 54464-57-2

Date Report Requested: 07/27/2011

Time Report Requested: 12:19:40

First Dose M/F: 12/12/06 / 12/13/06

Lab: MBA

DAY ON TEST

**FISCHER 344-TACONIC RATS
FEMALE****100%**

ANIMAL ID

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

*** TOTALS****CARDIOVASCULAR SYSTEM**

Blood Vessel

+ + + + + + + + + + 10

Heart

+ + + + + + + + + + 10

ENDOCRINE SYSTEM

Adrenal Cortex

+ + + + + + + + + + 10

Adrenal Medulla

+ + + + + + + + + + 10

Parathyroid Gland

+ + + + + + + + + + 10

Pituitary Gland

+ + + + + + + + + + 10

Thyroid Gland

+ + + + + + + + + + 10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+ + + + + + + + + + 10

Ovary

+ + + + + + + + + + 10

Uterus

+ + + + + + + + + + 10

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**FISCHER 344-TACONIC RATS
FEMALE**

100%

ANIMAL ID

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

* TOTALS

HEMATOPOIETIC SYSTEM

Bone Marrow

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 2 | 2 | 2 | 2 | | | 3 | | | | | 5 2.2 |

Spleen

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Thymus

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

INTEGUMENTARY SYSTEM

Mammary Gland

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Skin, Site Of Application

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

Hyperkeratosis

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|--|--|-------|
| 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | | | 7 1.9 |
|---|---|---|---|---|---|---|---|---|--|--|-------|

Hyperplasia

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|--|--|-------|
| 2 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 2 | | | 8 1.9 |
|---|---|---|---|---|---|---|---|---|--|--|-------|

Dermis, Inflammation, Suppurative

| | | | | | | | | | | | |
|--|--|--|---|--|--|--|--|--|--|--|-------|
| | | | 1 | | | | | | | | 1 1.0 |
|--|--|--|---|--|--|--|--|--|--|--|-------|

Hair Follicle, Necrosis

| | | | | | | | | | | | |
|--|--|--|---|--|--|--|--|--|--|--|-------|
| | | | 2 | | | | | | | | 1 2.0 |
|--|--|--|---|--|--|--|--|--|--|--|-------|

MUSCULOSKELETAL SYSTEM

Bone

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS 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
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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TDMS No. 20307 - 03

Test Type: 90-DAY

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*** END OF REPORT ***

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+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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