Species/Strain: RATS/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

NTP Study Number: C99037

**Lock Date:** 01/24/2002

Cage Range: ALL

Date Range: ALL

**Reasons For Removal:** ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

**TDMSE Version:** 3.0.2.3\_002

**PWG Approval Date:** NONE

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TES	ST 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 7 7 7 7	
VEHICLE CONTROL  ANIMAL	ID 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* TOTALS
ALIMENTARY SYSTEM		
Esophagus	+ + + + +	5
Intestine Large, Cecum	+ + + + +	5
Intestine Large, Colon	+ + + + +	5
Intestine Large, Rectum	+ + + + +	5
Intestine Small, Duodenum	+ + + + +	5
Intestine Small, Ileum	+ + + + +	5
Intestine Small, Jejunum	+ + + + +	5
Liver	+ + + + +	5
Pancreas	+ + + + +	5
Salivary Glands	+ + + + +	5
Stomach, Forestomach	+ + + + +	5
Stomach, Glandular	+ + + + +	5
CARDIOVASCULAR SYSTEM		
Blood Vessel	+ + + + +	5
Heart	+ + + + +	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
VEHICLE CONTROL  ANIMAL ID	0 0 0 0	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	* TOTALS
ENDOCRINE SYSTEM		-	-	-	-	
Adrenal Cortex	+	+	+	+	+	5
Adrenal Medulla	+	+	+	+	+	5
Islets, Pancreatic	+	+	+	+	+	5
Parathyroid Gland	+	+	+	+	+	5
Pituitary Gland	+	+	+	+	+	5
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE				-		
GENITAL SYSTEM						
Epididymis	+	+	+	+	+	5
Preputial Gland	+	+	+	+	+	5
Prostate	+	+	+	+	+	5
Seminal Vesicle	+	+	M	+	+	4
Testes	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

**HEMATOPOIETIC SYSTEM** 

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Species/Strain: RATS/F 344/N

Route: GAVAGE

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture **CAS Number:** 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST	0	0	0	0	0	
FISCHER 344 RATS MALE	1 7	1 7	1 7	0 1 7	0 1 7	
VEHICLE CONTROL  ANIMAL ID	0 0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	* TOTALS
Bone Marrow	+	+	+	+	+	5
Lymph Node, Mandibular	М	М	М	М	М	0
Lymph Node, Mesenteric	+	+	+	+	+	5
Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5
INTEGUMENTARY SYSTEM						
Mammary Gland	М	М	+	+	+	3
Skin	+	+	+	+	+	5
MUSCULOSKELETAL SYSTEM						
Bone	+	+	+	+	+	5
Skeletal Muscle	+	+	+	+	+	5
NERVOUS SYSTEM						
Brain, NOS	+	+	+	+	+	5
Peripheral Nerve, Sciatic	+	+	+	+	+	5
Spinal Cord, Cervical	+	+	+	+	+	5
Spinal Cord, Lumbar	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Species/Strain: RATS/F 344/N

Route: GAVAGE

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST FISCHER 344 RATS MALE	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
VEHICLE CONTROL  ANIMAL ID	0 0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	* TOTALS
RESPIRATORY SYSTEM			-	-	-	
Larynx	+	+	ı	ı	+	3
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
Trachea	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
Eye	+	+	+	+	+	5
Harderian Gland	+	+	+	+	+	5
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY Route: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture **CAS Number:** 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST FISCHER 344 RATS MALE	
1.0 MG/KG	
ANIMAL ID	
	* TOTALS
ALIMENTARY SYSTEM	TOTALS
NONE	
CARDIOVASCULAR SYSTEM	
NONE	
ENDOCRINE SYSTEM	
NONE	
GENERAL BODY SYSTEM	
NONE	
GENITAL SYSTEM	
NONE	
HEMATOPOIETIC SYSTEM	
NONE	
INTEGUMENTARY SYSTEM	
NONE	
MUSCULOSKELETAL SYSTEM	
NONE	
* Total animals with tissue examined microscopically. Total animals with tumor	M. Missing tissue

<sup>...</sup> I otal animals with tissue examined microscopically; I otal animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

	DAY ON TEST			
<b>FISCHER 344 RAT</b>	S MALE	 	 	
1.0 MG/KG				
	ANIMAL ID			
		 	 	* TOTALS
NERVOUS SYSTE	M			
NONE				
RESPIRATORY SY	YSTEM			
NONE				
SPECIAL SENSES	SYSTEM			
NONE				
URINARY SYSTEM	И			
NONE				
SYSTEMIC LESIO	NS			
Multiple Organ				0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

+ .. Tissue examined microscopically

X .. Lesion present
I .. Insufficient tissue

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

A .. Autolysis precludes evaluation

DAY ON TEST FISCHER 344 RATS MALE		
3.0 MG/KG		
ANIMAL ID		
	* TOTALS	
ALIMENTARY SYSTEM		
NONE		
CARDIOVASCULAR SYSTEM		
NONE		
ENDOCRINE SYSTEM		
NONE		
GENERAL BODY SYSTEM		
NONE		
GENITAL SYSTEM		
NONE		
HEMATOPOIETIC SYSTEM		
NONE		
INTEGUMENTARY SYSTEM		
NONE		
MUSCULOSKELETAL SYSTEM		
NONE		
* Tatal animals with times a complete decimal animals with the complete the complet	M. Missing tippes	
* Total animals with tissue examined microscopically; Total animals with tumor	M Missing tissue	

Page 8

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

	DAY ON TEST		
FISCHER 344 RATS	MALE		
3.0 MG/KG			
	ANIMAL ID		
		* TO	TALS
NERVOUS SYSTEM	I		
NONE			
RESPIRATORY SY	STEM		
NONE			
SPECIAL SENSES	SYSTEM		
NONE			
URINARY SYSTEM			
NONE			
SYSTEMIC LESION	<b>S</b>		
Multiple Organ		,	0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type**: 14-DAY **Route**: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST FISCHER 344 RATS MALE	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
10.0 MG/KG ANIMAL ID	0 0 0 3 1	0 0 0 3 2	0 0 0 3 3	0 0 0 3 4	0 0 0 3 5	* TOTALS
ALIMENTARY SYSTEM	•					
Liver	+					1
CARDIOVASCULAR SYSTEM						
NONE						
ENDOCRINE SYSTEM						
NONE						
GENERAL BODY SYSTEM						
NONE						
GENITAL SYSTEM						
NONE						
HEMATOPOIETIC SYSTEM						
NONE						
INTEGUMENTARY SYSTEM						
NONE						
MUSCULOSKELETAL SYSTEM						

NONE

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

NONE

**SYSTEMIC LESIONS** 

Multiple Organ

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

1

Lab: MBA

	DAY ON TEST	0	0	0	0	0	
FISCHER 344 RATS	MALE	1 7	7	1 7	1 7	1 7	
10.0 MG/KG	ANIMAL ID	0 0 0 3 1	0 0 0 3 2	0 0 0 3 3	0 0 0 3 4	0 0 0 3 5	* TOTALS
NERVOUS SYSTEM					-		
NONE							
RESPIRATORY SYS	STEM		•				
NONE							
SPECIAL SENSES	SYSTEM						
NONE							
URINARY SYSTEM							

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST FISCHER 344 RATS MALE	
30.0 MG/KG	
ANIMAL ID	
	* TOTALS
ALIMENTARY SYSTEM	
NONE	
CARDIOVASCULAR SYSTEM	
NONE	
ENDOCRINE SYSTEM	
NONE	
GENERAL BODY SYSTEM	
NONE	
GENITAL SYSTEM	
NONE	
HEMATOPOIETIC SYSTEM	
NONE	
INTEGUMENTARY SYSTEM	
NONE	
MUSCULOSKELETAL SYSTEM	
NONE	

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

	DAY ON TEST	
<b>FISCHER 344 RAT</b>	S MALE	
30.0 MG/KG		
	ANIMAL ID	
		 * TOTALS
NERVOUS SYSTE	Л	
NONE		
RESPIRATORY SY	STEM	
NONE		
SPECIAL SENSES	SYSTEM	
NONE		
URINARY SYSTEM		
NONE		
SYSTEMIC LESION	IS	
Multiple Organ		0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type**: 14-DAY **Route**: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TES	ST	
100 MG/KG ANIMAL I	ID 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* TOTALS
ALIMENTARY SYSTEM		
Esophagus	+ + + + +	5
Intestine Large, Cecum	+ + + + +	5
Intestine Large, Colon	+ + + + +	5
Intestine Large, Rectum	+ + + + +	5
Intestine Small, Duodenum	+ + + + +	5
Intestine Small, Ileum	+ + + +	5
Intestine Small, Jejunum	+ + + +	5
Liver	+ + + +	5
Pancreas	+ + + +	5
Salivary Glands	+ + + +	5
Stomach, Forestomach	+ + + +	5
Stomach, Glandular	+ + + + +	5
CARDIOVASCULAR SYSTEM		
Blood Vessel	+ + + + +	5
Heart	+ + + + +	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0 0 1 7	0	0	0	0	
FISCHER 344 RATS MALE	7	1 7	1 7	1 0	1 7	
100 MG/KG ANIMAL ID	0 0 0 5 1	0 0 0 5 2	0 0 0 5 3	0 0 0 5 4	0 0 0 5 5	* TOTALS
ENDOCRINE SYSTEM						
Adrenal Cortex	+	+	+	+	+	5
Adrenal Medulla	+	+	+	+	+	5
Islets, Pancreatic	+	+	+	+	+	5
Parathyroid Gland	М	+	+	М	+	3
Pituitary Gland	+	+	+	+	+	5
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE					_	
GENITAL SYSTEM						
Epididymis	+	+	+	+	+	5
Preputial Gland	+	+	+	+	+	5
Prostate	+	+	+	+	+	5
Seminal Vesicle	М	+	+	+	+	4
Testes	+	+	+	+	+	5

# \* .. Total animals with tissue examined microscopically; Total animals with tumor

**HEMATOPOIETIC SYSTEM** 

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	
FISCHER 344 RATS MALE	7	7	7	Ó	7	
100 MG/KG ANIMAL ID	0 0 0 5 1	0 0 0 5 2	0 0 0 5 3	0 0 0 5 4	0 0 0 5 5	* TOTALS
Bone Marrow	+	+	+	+	+	5
Lymph Node, Mandibular	М	М	М	М	М	0
Lymph Node, Mesenteric	+	+	+	+	+	5
Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5
INTEGUMENTARY SYSTEM						
Mammary Gland	+	М	М	+	M	2
Skin	+	+	+	+	+	5
MUSCULOSKELETAL SYSTEM						
Bone	+	+	+	+	+	5
Skeletal Muscle	+	+	+	+	+	5
NERVOUS SYSTEM						
Brain, NOS	+	+	+	+	+	5
Peripheral Nerve, Sciatic	+	+	+	+	+	5
Spinal Cord, Cervical	+	+	+	+	+	5
Spinal Cord, Lumbar	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0	0	0	0	0	
DAY ON TEST FISCHER 344 RATS MALE	0 1 7	0 1 7	0 0 1 7	0 1 0	0 1 7	
100 MG/KG ANIMAL ID	0 0 0 5	0 0 0 5	0 0 0 5	0 0 0 5	0 0 0 5	
	1	2	3	4	5	* TOTALS
RESPIRATORY SYSTEM						
Larynx	+	+	+	ı	ı	3
Lung	+	+	+	+	+	5
Nose	+	+	+	Α	+	4
Trachea	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
Eye	+	+	+	+	+	5
Harderian Gland	+	+	+	+	+	5
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

## \*\*\* END OF MALE DATA \*\*\*

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Species/Strain: RATS/F 344/N

Route: GAVAGE

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
VEHICLE CONTROL  ANIMAL II	0 1 6 7 8 9 0	* TOTALS
ALIMENTARY SYSTEM		
Esophagus	+ + + + +	5
Intestine Large, Cecum	+ + + + +	5
Intestine Large, Colon	+ + + + +	5
Intestine Large, Rectum	+ + + + +	5
Intestine Small, Duodenum	+ + + + +	5
Intestine Small, Ileum	+ + + + +	5
Intestine Small, Jejunum	+ + + + +	5
Liver	+ + + + +	5
Pancreas	+ + + + +	5
Salivary Glands	+ + + + +	5
Stomach, Forestomach	+ + + + +	5
Stomach, Glandular	+ + + + +	5
CARDIOVASCULAR SYSTEM		
Blood Vessel	+ + + + +	5
Heart	+ + + + +	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TE	EST 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1	
VEHICLE CONTROL ANIMAL	0 0 0 0 0	* TOTALS
ENDOCRINE SYSTEM		
Adrenal Cortex	+ + + + +	5
Adrenal Medulla	+ + + + +	5
Islets, Pancreatic	+ + + + +	5
Parathyroid Gland	+ + M + M	3
Pituitary Gland	+ + + + +	5
Thyroid Gland	+ + + + +	5
GENERAL BODY SYSTEM		
NONE		
GENITAL SYSTEM		
Clitoral Gland	+ + + + +	5
Ovary	+ + + + +	5
Uterus	+ + + + +	5
HEMATOPOIETIC SYSTEM		
Bone Marrow	+ + + + +	5
Lymph Node, Mandibular	M M M M	0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0	0	0	0	0	
FISCHER 344 RATS FEMALE	1 7	1 7	1 7	1 7	1 7	
VEHICLE CONTROL  ANIMAL ID	0 0 0 0 6	0 0 0 0 7	0 0 0 0 8	0 0 0 0 9	0 0 0 1 0	* TOTALS
Lymph Node, Mesenteric	+	+	+	+	+	5
Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5
INTEGUMENTARY SYSTEM						
Mammary Gland	+	+	+	+	+	5
Skin	+	+	+	+	+	5
MUSCULOSKELETAL SYSTEM						
Bone	+	+	+	+	+	5
Skeletal Muscle	+	+	+	+	+	5
NERVOUS SYSTEM						
Brain, NOS	+	+	+	+	+	5
Peripheral Nerve, Sciatic	+	+	+	+	+	5
Spinal Cord, Cervical	+	+	+	+	+	5
Spinal Cord, Lumbar	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Larynx	I	I	I	I	+	1

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST	0	0	0	0	0	
FISCHER 344 RATS FEMALE	1 7	1 7	1 7	1 7	1 7	
VEHICLE CONTROL  ANIMAL ID	0 0 0 0 6	0 0 0 0 7	0 0 0 0 8	0 0 0 0 9	0 0 0 1 0	* TOTALS
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
Trachea	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
Eye	+	+	+	+	+	5
Harderian Gland	+	+	+	+	+	5
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY Route: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture **CAS Number:** 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST FISCHER 344 RATS FEMALE		
1.0 MG/KG		
ANIMAL ID		
		* ******
		* TOTALS
ALIMENTARY SYSTEM		
NONE		
CARDIOVASCULAR SYSTEM		
NONE		
ENDOCRINE SYSTEM		
NONE		
GENERAL BODY SYSTEM		
NONE		
GENITAL SYSTEM		
NONE		
HEMATOPOIETIC SYSTEM		
NONE		
INTEGUMENTARY SYSTEM		
NONE		
MUSCULOSKELETAL SYSTEM		
NONE		
* Total animals with tissue examined microscopically; Total animals with tumor	M Missing tissue	

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

I .. Insufficient tissue

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

	DAY ON TEST		
<b>FISCHER 344 RAT</b>	S FEMALE		
1.0 MG/KG			
	ANIMAL ID		
			* TOTALS
NERVOUS SYSTE	M		
NONE			
RESPIRATORY SY	STEM		
NONE			
SPECIAL SENSES	SYSTEM		
NONE			
URINARY SYSTEM	1		
NONE			
SYSTEMIC LESION	NS		
Multiple Organ			0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

FISCHER 344 RATS FE	DAY ON TEST	
3.0 MG/KG		
3.0 WO/NO	ANIMAL ID	
		* TOTAL 0
		* TOTALS
ALIMENTARY SYSTEM		
NONE		
CARDIOVASCULAR SY	STEM	
NONE		
ENDOCRINE SYSTEM		
NONE		
GENERAL BODY SYST	··M	
NONE		
GENITAL SYSTEM		
NONE		
HEMATOPOIETIC SYST	= EM	
NONE		
INTEGUMENTARY SYS	EM	
NONE		
MUSCULOSKELETAL S	YSTEM	
NONE		

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

	DAY ON TEST			
<b>FISCHER 344 RATS FE</b>	EMALE			
3.0 MG/KG				
	ANIMAL ID			
			 	* TOTALS
NERVOUS SYSTEM				
NONE				
RESPIRATORY SYSTE	M			
NONE				
SPECIAL SENSES SYS	STEM			
NONE				
URINARY SYSTEM				
NONE				
SYSTEMIC LESIONS				
Multiple Organ				0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY Route: GAVAGE

Species/Strain: RATS/F 344/N

X .. Lesion present I .. Insufficient tissue

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture **CAS Number:** 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	
FISCHER 344 RATS FEMALE  10.0 MG/KG	
ANIMAL ID	
	* TOTALS
ALIMENTARY SYSTEM	
NONE	
CARDIOVASCULAR SYSTEM	
NONE	
ENDOCRINE SYSTEM	
NONE	
GENERAL BODY SYSTEM	
NONE	
GENITAL SYSTEM	
NONE	
HEMATOPOIETIC SYSTEM	
NONE	
INTEGUMENTARY SYSTEM	
NONE	
MUSCULOSKELETAL SYSTEM	
NONE	
* Total animals with tissue examined microscopically; Total animals with tumor	M Missing tissue
+ Tissue examined microscopically	A Autolysis precludes evaluation

Page 26

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DA	Y ON TEST	
<b>FISCHER 344 RATS FEMAI</b>	_E	
10.0 MG/KG		
	ANIMAL ID	
		* TOTALS
NERVOUS SYSTEM		
NONE		
RESPIRATORY SYSTEM		
NONE		
SPECIAL SENSES SYSTEM	1	
NONE		
URINARY SYSTEM		
NONE		
SYSTEMIC LESIONS		
Multiple Organ		0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST FISCHER 344 RATS FEMALE 30.0 MG/KG		
ANIMAL ID		
	*	TOTALS
ALIMENTARY SYSTEM		
NONE		
CARDIOVASCULAR SYSTEM		
NONE		
ENDOCRINE SYSTEM		
NONE		
GENERAL BODY SYSTEM		
NONE		
GENITAL SYSTEM		
NONE		
HEMATOPOIETIC SYSTEM		
NONE		
INTEGUMENTARY SYSTEM		
NONE		
MUSCULOSKELETAL SYSTEM		
NONE		
* Total animals with the constitution of the c	M. Mississ tissus	

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

	DAY ON TEST			
FISCHER 344 RATS FE				
30.0 MG/KG				
	ANIMAL ID			
				* TOTALS
NERVOUS SYSTEM				
NONE				
RESPIRATORY SYSTE	М			
NONE				
SPECIAL SENSES SYS	ТЕМ			
NONE				
URINARY SYSTEM				
NONE				
SYSTEMIC LESIONS				
Multiple Organ				0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Species/Strain: RATS/F 344/N

Route: GAVAGE

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
100 MG/KG ANIMAL ID	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	0 0 0 6 0	* TOTALS
ALIMENTARY SYSTEM	•					
Esophagus	+	+	+	+	+	5
Intestine Large, Cecum	+	+	+	+	+	5
Intestine Large, Colon	+	+	+	+	+	5
Intestine Large, Rectum	+	+	+	+	+	5
Intestine Small, Duodenum	+	+	+	+	+	5
Intestine Small, Ileum	+	+	+	+	+	5
Intestine Small, Jejunum	+	+	+	+	+	5
Liver	+	+	+	+	+	5
Pancreas	+	+	+	+	+	5
Salivary Glands	+	+	+	+	+	5
Stomach, Forestomach	+	+	+	+	+	5
Stomach, Glandular	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM			-			
Blood Vessel	+	+	+	+	+	5
Heart	+	+	+	+	+	5

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST FISCHER 344 RATS FEMALE	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
100 MG/KG ANIMAL ID	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	0 0 0 6 0	* TOTALS
ENDOCRINE SYSTEM		-		-		
Adrenal Cortex	+	+	+	+	+	5
Adrenal Medulla	+	+	+	+	+	5
Islets, Pancreatic	+	+	+	+	+	5
Parathyroid Gland	+	М	+	+	+	4
Pituitary Gland	+	+	+	+	+	5
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE		-				
GENITAL SYSTEM						
Clitoral Gland	+	+	+	+	+	5
Ovary	+	+	+	+	+	5
Uterus	+	+	+	+	+	5
HEMATOPOIETIC SYSTEM						
Bone Marrow	+	+	+	+	+	5
Lymph Node, Mandibular	М	М	М	М	M	0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type**: 14-DAY **Route**: GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
100 MG/KG ANIMAL ID	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	* TOTALS
Lymph Node, Mesenteric	+	+	+	+	5
Spleen	+	+	+	+	5
Thymus	+	+	+	+	5
INTEGUMENTARY SYSTEM					
Mammary Gland	+	+	+	+	5
Skin	+	+	+	+	5
MUSCULOSKELETAL SYSTEM					
Bone	+	+	+	+	5
Skeletal Muscle	+	+	+	+	5
NERVOUS SYSTEM					
Brain, NOS	+	+	+	+	5
Peripheral Nerve, Sciatic	+	+	+	+	5
Spinal Cord, Cervical	+	+	+	+	5
Spinal Cord, Lumbar	+	+	+	+	5
RESPIRATORY SYSTEM					
Larynx	+	+	+	+	4

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

**Test Type:** 14-DAY **Route:** GAVAGE

Species/Strain: RATS/F 344/N

## P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

alpha/beta Thujone mixture CAS Number: 76231-76-0

Date Report Requested: 09/19/2016 Time Report Requested: 14:00:38 First Dose M/F: 05/07/01 / 05/07/01

Lab: MBA

DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
100 MG/KG ANIMAL ID	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	0 0 0 6 0	* TOTALS
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
Trachea	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
Eye	+	+	+	+	+	5
Harderian Gland	+	+	+	+	+	5
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

\*\*\* END OF REPORT \*\*\*

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically