

Experiment Number: 99037-03
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: alpha/beta Thujone mixture
CAS Number: 76231-76-0

Date Report Requested: 10/20/2014
Time Report Requested: 16:29:26
First Dose M/F: NA / NA
Lab: SRI

C Number:	C99037B
Lock Date:	04/04/2003
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

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Route: GAVAGE

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Date Report Requested: 10/20/2014

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
0 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	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
Hematopoietic Cell Proliferation				1		1				1	3 1.0
Hepatodiaphragmatic Nodule		X			X			X	X		4
Vacuolization Cytoplasmic		1			1		1	1	1		5 1.0
Mesentery			+								1
Accessory Spleen			1								1 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus		2	1	1	2	1	1	1	1	1	9 1.2
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1		1	1	2				1	1	6 1.2

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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F 344/N Rat Male
0 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Rathkes Cleft, Dilatation			1								1 1.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Ultimobranchial Cyst									1		1 1.0

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Mixed Cell						2					1 2.0
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	+	M	M	M	M	M	1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10

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F 344/N Rat Male
0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage						2					1 2.0
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Pigmentation				1							1 1.0
Peripheral Nerve	+	+	+	+	+	+	+	+	+	+	10
Spinal Cord	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage	1		1	1	2		1	1	1		7 1.1
Inflammation, Chronic	1										1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

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0 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage										2	1 2.0
Inflammation, Acute										1	1 1.0

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy			1	1	1	1	1	1		1	8 1.0
Renal Tubule, Mineralization										1	1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:26

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
12.5 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver			+	+				+		3
Hepatodiaphragmatic Nodule			X	X				X		3
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

NONE

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	10
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General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

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+ ..Tissue examined microscopically

X ..Lesion present

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
12.5 MG/KG

	DAY ON TEST										
	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	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	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	2	
	1	2	3	4	5	6	7	8	9	0	
Skeletal Muscle	M	M	M	M	M	M	M	M	M	M	0
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Peripheral Nerve	M	M	M	M	M	M	M	M	M	M	0
Spinal Cord	M	M	M	M	M	M	M	M	M	M	0
Respiratory System											
NONE											
Special Senses System											
NONE											
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy	1	1	1	1	1	1	1	1	1	1	10 1.0
Renal Tubule, Mineralization							1				1 1.0

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+ ..Tissue examined microscopically

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I ..Insufficient tissue

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Route: GAVAGE

Species/Strain: Rat/F 344/N

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Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:26

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
25 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

NONE

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Accessory Adrenal Cortical Nodule							2				1 2.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

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X ..Lesion present

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
25 MG/KG

DAY ON TEST	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	
	3	3	3	3	3	3	3	3	3	3	
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	
	2	2	2	2	2	2	2	2	2	3	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Musculoskeletal System

Skeletal Muscle M M M M M M M M M M 0

Nervous System

Brain + + + + + + + + + + 10

Peripheral Nerve M M M M M M M M M M 0

Spinal Cord M M M M M M M M M M 0

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney + + + + + + + + + + 10

Nephropathy 1 1 1 1 1 1 1 1 1 1 10 1.0

Renal Tubule, Mineralization 1 1 1 1 1 1 1 1 1 1 2 1.0

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CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
50 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver											+	+	2
Hepatodiaphragmatic Nodule											X		1
Inflammation, Chronic												1	1 1.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+			10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+			10

Cardiovascular System

NONE													
Endocrine System													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			10
Hypertrophy											3		1 3.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			10
Rathkes Cleft, Dilatation												1	1 1.0

General Body System

NONE

Genital System

NONE

Hematopoietic System

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Lab: SRI

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50 MG/KG

DAY ON TEST	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	
	3	3	3	3	3	3	3	3	3	3	
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	
	3	3	3	3	3	3	3	3	3	4	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

NONE
Integumentary System

NONE
Musculoskeletal System

Skeletal Muscle M M M M M M M M M M 0

Nervous System

Brain + + + + + + + + + + 10

Peripheral Nerve M M M M M M M M M M 0

Spinal Cord M M M M M M M M M M 0

Respiratory System

NONE
Special Senses System

NONE
Urinary System

Kidney + + + + + + + + + + 10

Nephropathy 1 1 1 1 1 1 1 1 1 3 10 1.2

Renal Tubule, Mineralization 1 1 1.0

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CAS Number: 76231-76-0

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: SRI

F 344/N Rat Male
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	5	9	9	9	9	5	9
	3	3	3	6	3	3	3	3	7	3
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
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	A	+	9
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	A	+	+	+	+	A	+	8
Intestine Small, Jejunum	+	+	+	A	+	+	+	+	A	+	8
Liver	+	+	+	+	+	+	+	+	+	+	10
Clear Cell Focus								1			1 1.0
Hematopoietic Cell Proliferation	1			1							2 1.0
Hepatodiaphragmatic Nodule									X		1
Inflammation, Chronic						1					1 1.0
Vacuolization Cytoplasmic				1	1			1			3 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Vacuolization Cytoplasmic					1						1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus					2	1			1	1	4 1.3
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Degeneration, Cystic							2				1 2.0
Hyperplasia, Squamous							2				1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	5	9	9	9	9	5	9
	3	3	3	6	3	3	3	3	7	3
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
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Edema						2					1	2.0
Hemorrhage						2					1	2.0
Inflammation, Chronic						2					1	2.0
Ulcer						3					1	3.0

Cardiovascular System

Heart												10	
Cardiomyopathy	1	1	2	1	1	2			1		1	8	1.3

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		10	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		10	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+		10	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		10	
Angiectasis										3		1	3.0
Pars Distalis, Atrophy										2		1	2.0
Rathkes Cleft, Dilatation						1	1		1			3	1.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		10	

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+		10
Preputial Gland	+	+	+	+	+	+	+	+	+	+		10

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+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
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1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	5	9	9	9	9	5	9
	3	3	3	6	3	3	3	3	7	3
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
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage				2		1			1	1	4 1.3
Integumentary System											
Mammary Gland	+	+	M	+	+	M	+	+	+	M	7
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	M	M	M	+	M	M	M	M	+	M	2
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Congestion				2					2		2 2.0
Hemorrhage				2					2		2 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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	5	9	9	9	9	5	9
	3	3	3	6	3	3	3	3	7	3
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
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Peripheral Nerve	M	M	M	+	M	M	M	M	+	M	2
Spinal Cord	M	M	M	+	M	M	M	M	+	M	2
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Congestion				2							1 2.0
Hemorrhage	1		1	2	1						4 1.3
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epi, Degeneration								1			1 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy	1	1	1	1	1	2	1	1		1	9 1.1
Renal Tubule, Mineralization									1		1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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

+ ..Tissue examined microscopically

X ..Lesion present

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	7	9	9	9	8	8	8	5	8	8
	7	3	3	2	5	5	4	6	4	4
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
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	9
Hemorrhage				2							1 2.0
Inflammation, Chronic Active				2							1 2.0
Intestine Large, Colon	+	+	+	+	+	A	+	+	+	+	9
Intestine Large, Rectum	+	+	+	+	+	A	+	+	+	+	9
Intestine Small, Duodenum	+	+	+	+	+	A	+	+	+	+	9
Intestine Small, Ileum	+	+	+	+	+	A	A	+	+	+	8
Intestine Small, Jejunum	+	+	+	+	A	A	A	+	A	+	6
Liver	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic Cell Proliferation								1			1 1.0
Hepatodiaphragmatic Nodule	X					X					2
Inflammation, Chronic				2							1 2.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Vacuolization Cytoplasmic								2	1		2 1.5
Atrophy					1						1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus				1	1			2	1	1	5 1.2
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Degeneration, Cystic					3						1 3.0
Hyperplasia, Squamous					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

Experiment Number: 99037-03

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/20/2014

Test Type: 90-DAY

Test Compound: alpha/beta Thujone mixture

Time Report Requested: 16:29:27

Route: GAVAGE

CAS Number: 76231-76-0

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: SRI

F 344/N Rat Male
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	7	9	9	9	8	8	8	5	8	8
	7	3	3	2	5	5	4	6	4	4
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
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10	
Edema					2						1	2.0
Erosion, Focal				2							1	2.0
Hemorrhage				2							1	2.0
Pigmentation					2						1	2.0
Ulcer			2								1	2.0
Cardiovascular System												
Heart	+	+	+	+	+	+	+	+	+	+	10	
Cardiomyopathy									1	1	2	1.0
Endocrine System												
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10	
Hypertrophy									1		1	1.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10	
Angiectasis									2		1	2.0
Pars Distalis, Atrophy			2			3					2	2.5
Pars Distalis, Hemorrhage		3									1	3.0
Pars Distalis, Necrosis		4									1	4.0
Rathkes Cleft, Dilatation		2		1	2	2					4	1.8
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10	
Ultimobranchial Cyst					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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	7	9	9	9	8	8	8	5	8	8
	7	3	3	2	5	5	4	6	4	4
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
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node							+		+		2
Hyperplasia, Lymphoid							2				1 2.0
Pancreatic, Hemorrhage									1		1 1.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Congestion							3	2		2 2	4 2.3
Pigmentation, Hemosiderin							2				1 2.0
Thymus	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage	1			2				3	2	1 2	6 1.8

Integumentary 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

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:27

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
100 MG/KG

	DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	7	9	9	9	8	8	8	5	8	8	
	7	3	3	2	5	5	4	6	4	4	
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	
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	*TOTALS
Mammary Gland	M	+	+	+	+	+	+	+	M	+	8
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Congestion	1			1			2	2	1	2	6 1.5
Hemorrhage					2		1		2	1	4 1.5
Peripheral Nerve	+	+	+	+	+	+	+	+	+	+	10
Spinal Cord	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Congestion	1			1	2	2	2	2	2	1	8 1.6
Inflammation, Acute					1						1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	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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A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	7	9	9	9	8	8	8	5	8	8	
	7	3	3	2	5	5	4	6	4	4	
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	
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy	2	1	3	2		1	1	1	1	1	9 1.4
Renal Tubule, Mineralization			1	1					1		3 1.0
Renal Tubule, Necrosis					2						1 2.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/20/2014

Test Type: 90-DAY

Test Compound: alpha/beta Thujone mixture

Time Report Requested: 16:29:28

Route: GAVAGE

CAS Number: 76231-76-0

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: SRI

F 344/N Rat Female 0 MG/KG	DAY ON TEST	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	
		3	3	3	3	3	3	3	3	3	3	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	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	7		
	1	2	3	4	5	6	7	8	9	0		

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
Hematopoietic Cell Proliferation				1			1				2 1.0
Hepatodiaphragmatic Nodule					X						1
Inflammation, Chronic	1		2		1			1	1	1	6 1.2
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus			1			1		1		1	4 1.0
Parotid Gl, Necrosis, Focal									1		1 1.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy		1						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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
0 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

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
Cyst			X			X					2
Uterus	+	+	+	+	+	+	+	+	+	+	10
Dilatation						2				2	2 2.0
Vagina	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	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

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
0 MG/KG

	DAY ON TEST										
	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	
	3	3	3	3	3	3	3	3	3	3	
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	
	6	6	6	6	6	6	6	6	6	7	
	1	2	3	4	5	6	7	8	9	0	*TOTALS
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Peripheral Nerve	+	+	+	+	+	+	+	+	+	+	10
Spinal Cord	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Alveolus, Infiltration Cellular, Histiocyte, Focal				1							1 1.0
Hemorrhage	1		1	1	1	1	2	2		1	8 1.3
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
0 MG/KG

DAY ON TEST	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	
	3	3	3	3	3	3	3	3	3	3	
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	
	6	6	6	6	6	6	6	6	6	7	
	1	2	3	4	5	6	7	8	9	0	*TOTALS
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Mineralization			1						1	1	3 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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

+ ..Tissue examined microscopically

X ..Lesion present

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A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
12.5 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	7	7	7	7	7	7	7	7	7	8
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver											+	1
Hepatodiaphragmatic Nodule											X	1
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+		10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+		10

Cardiovascular System

NONE

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		10

General Body System

NONE

Genital System

Ovary	+	+	+	+	+	+	+	+	+	+		10
Cyst		X						X				2
Uterus					+	+				+		3
Dilatation					1					1	2	1.0
Vagina	+	+	+	+	+	+	+	+	+	+		10
Cyst							X					1

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
12.5 MG/KG

DAY ON TEST	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	
	3	3	3	3	3	3	3	3	3	3	
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	
	7	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Hematopoietic System

Lymph Node											+	1	
Hyperplasia, Lymphoid											1		1 1.0

Integumentary System

NONE

Musculoskeletal System

Skeletal Muscle	M	M	M	M	M	M	M	M	M	M	0
-----------------	---	---	---	---	---	---	---	---	---	---	---

Nervous System

Brain	+	+	+	+	+	+	+	+	+	+	10
Peripheral Nerve	M	M	M	M	M	M	M	M	M	M	0
Spinal Cord	M	M	M	M	M	M	M	M	M	M	0

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Mineralization	1	1	1	1	1		1		1	1	8 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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
25 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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
	8	8	8	8	8	8	8	8	8	9
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver				+					+		2
Hepatodiaphragmatic Nodule				X					X		2
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

NONE											
Endocrine System											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Rathkes Cleft, Dilatation				1							1 1.0

General Body System

NONE											
Genital System											
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus				+							1
Dilatation				2							1 2.0
Vagina	+	+	+	+	+	+	+	+	+	+	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

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
25 MG/KG

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		
	3	3	3	3	3	3	3	3	3	3	3		
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		
	8	8	8	8	8	8	8	8	8	8	9		
	1	2	3	4	5	6	7	8	8	9	0		
	*TOTALS												
Nephropathy												1	1.0
Renal Tubule, Mineralization	1	1	1	1	1		1	1	1			8	1.0

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
50 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	9	9	9	9	9	9	9	9	9	0
	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
Hematopoietic Cell Proliferation	1	1	1		1						4 1.0
Hepatodiaphragmatic Nodule				X		X					2
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus	2				1	1	2		1	2	6 1.5
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Eosinophil		2									1 2.0
Inflammation, Chronic		2									1 2.0
Mineralization							1				1 1.0

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
50 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Congestion								2			1 2.0
Pars Distalis, Necrosis			4								1 4.0
Rathkes Cleft, Dilatation	1			1	1	1				1	5 1.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Ectopic Thymus			X								1

General Body System

NONE

Genital System

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Cyst									X		1
Uterus	+	+	+	+	+	+	+	+	+	+	10
Dilatation						2					1 2.0
Vagina	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
50 MG/KG

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3
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	1
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node	+					+					2
Hemorrhage	2										1 2.0
Pancreatic, Hemorrhage	2					2					2 2.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia, Lymphoid							2				1 2.0
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	M	M	M	M	M	M	M	M	M	M	0
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Pigmentation	1	1		1		1	2			1	6 1.2
Peripheral Nerve	M	M	M	M	M	M	M	M	M	M	0
Spinal Cord	M	M	M	M	M	M	M	M	M	M	0
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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
50 MG/KG

	DAY ON TEST											
	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS	
	9	9	9	9	9	9	9	9	9	9		
	3	3	3	3	3	3	3	3	3	3		
Lung	+	+	+	+	+	+	+	+	+	+	10	
Hemorrhage							1	1	1		3	1.0
Nose	+	+	+	+	+	+	+	+	+	+	10	
Trachea	+	+	+	+	+	+	+	+	+	+	10	
Special Senses System												
Eye	+	+	+	+	+	+	+	+	+	+	10	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10	
Urinary System												
Kidney	+	+	+	+	+	+	+	+	+	+	10	
Nephropathy	1					3		2			3	2.0
Renal Tubule, Mineralization	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

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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:28

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	5	6	9	5	4	9	4	8	4
	3	7	4	3	8	4	3	3	6	3
ANIMAL ID	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

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	A	+	9
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage					1						1 1.0
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	A	+	+	+	A	+	8
Intestine Small, Jejunum	A	+	+	+	+	+	+	+	+	+	9
Liver	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic Cell Proliferation	1				2						2 1.5
Hepatodiaphragmatic Nodule						X					1
Necrosis					1						1 1.0
Vacuolization Cytoplasmic					2			1			2 1.5
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Vacuolization Cytoplasmic									2		1 2.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus		1		1					1		3 1.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Degeneration, Cystic					2						1 2.0
Edema						2					1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

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+ ..Tissue examined microscopically

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	4	5	6	9	5	4	9	4	8	4	
	3	7	4	3	8	4	3	3	6	3	
ANIMAL ID	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

Edema											2	1	2.0
Cardiovascular System													
Heart	+	+	+	+	+	+	+	+	+	+	10		
Endocrine System													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10		
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10		
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10		
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10		
Angiectasis			3								1	3.0	
Pars Distalis, Atrophy				3			3		2		3	2.7	
Pars Distalis, Necrosis						4					1	4.0	
Rathkes Cleft, Dilatation			2		2		1		2		4	1.8	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10		
Ectopic Thymus					X						1		
General Body System													
NONE													
Genital System													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10		
Ovary	+	+	+	+	+	+	+	+	+	+	10		
Uterus	+	+	+	+	+	+	+	+	+	+	10		
Vagina	+	+	+	+	+	+	+	+	+	+	10		

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X ..Lesion present

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1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
75 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	5	6	9	5	4	9	4	8	4
	3	7	4	3	8	4	3	3	6	3
ANIMAL ID	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

Vagina	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia, Lymphoid								2			1 2.0
Spleen	+	+	+	+	+	+	+	+	+	+	10
Atrophy					2						1 2.0
Thymus	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage		1	1		1		1				4 1.0
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Skeletal Muscle	M	M	M	M	+	M	M	M	+	M	2
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Congestion			1			2			2		3 1.7
Hemorrhage	2				1			1		2	4 1.5
Pigmentation		1		1	1		1		1		5 1.0

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X ..Lesion present
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1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
75 MG/KG

	DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	4	5	6	9	5	4	9	4	8	4	
	3	7	4	3	8	4	3	3	6	3	
ANIMAL ID	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
Peripheral Nerve	M	M	M	M	+	M	M	M	+	M	2
Spinal Cord	+	+	M	M	+	M	M	M	+	M	4
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Alveolus, Infiltration Cellular, Histiocyte, Focal							1				1 1.0
Congestion			2					2			2 2.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy			1		1						2 1.0
Renal Tubule, Mineralization	1	1	1	1	1	1	1	1	1	1	10 1.0
Renal Tubule, Necrosis					2						1 2.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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+ ..Tissue examined microscopically

X ..Lesion present

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	7	8	3	3	3	2	8	1
	3	1	8	6	7	6	7	9	1	7
ANIMAL ID	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									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	A	+	9	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10	
Liver	+	+	+	+	+	+	+	+	+	+	10	
Hematopoietic Cell Proliferation	1										1	1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic				1							1	1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10	
Parotid G, Basophilic Focus	2	1		1	1	1	1	1	2	1	9	1.2
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10	
Degeneration, Cystic					2						1	2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10	
Edema					2		2			2	3	2.0
Hemorrhage					1		1				2	1.0

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10	
Cardiomyopathy					1		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

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	7	8	3	3	3	2	8	1
	3	1	8	6	7	6	7	9	1	7
ANIMAL ID	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									

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	M	M	8
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Angiectasis			2								1 2.0
Pars Distalis, Atrophy		3	4	2							3 3.0
Rathkes Cleft, Dilatation	1	2		3				2	2		5 2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

General Body System

NONE

Genital System

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
Dilatation			1								1 1.0
Vagina	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node		+									1
Pancreatic, Hemorrhage			2								1 2.0

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Experiment Number: 99037-03

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Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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CAS Number: 76231-76-0

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Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	7	8	3	3	3	2	8	1
	3	1	8	6	7	6	7	9	1	7
ANIMAL ID	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

Pancreatic, Hemorrhage	2										1	2.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10	
Spleen	+	+	+	+	+	+	+	+	+	+	10	
Atrophy									2	1	2.0	
Thymus	+	+	+	+	+	+	+	+	+	+	10	
Hemorrhage	1		2		2					1	4	1.5
Integumentary System												
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10	
Skin	+	+	+	+	+	+	+	+	+	+	10	
Musculoskeletal System												
Bone	+	+	+	+	+	+	+	+	+	+	10	
Skeletal Muscle	+	+	+	+	+	+	+	+	+	+	10	
Nervous System												
Brain	+	+	+	+	+	+	+	+	+	+	10	
Congestion	2		1	1	2	2	2	1		1	8	1.5
Hemorrhage	2			2			2			3	2.0	
Pigmentation	1	1	2							1	4	1.3
Peripheral Nerve	+	+	+	+	+	+	+	+	+	+	10	
Spinal Cord	+	+	+	+	+	+	+	+	+	+	10	
Congestion	2								2	2	2.0	

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1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 99037-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/20/2014

Time Report Requested: 16:29:29

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
100 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	7	8	3	3	3	2	8	1
	3	1	8	6	7	6	7	9	1	7
ANIMAL ID	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									

Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	10
Congestion				1	2		2			2	4 1.8
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy	1								1	1	3 1.0
Renal Tubule, Degeneration							1				1 1.0
Renal Tubule, Mineralization	1	1	1	1	1	1	1	1	1		9 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

** END OF REPORT **

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

+ ..Tissue examined microscopically

X ..Lesion present

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