

Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:22
First Dose M/F: NA / NA
Lab: TSI MASON

| | |
|-----------------------------|--------------|
| C Number: | C60902B |
| Lock Date: | Not Entered. |
| 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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 Lab: TSI MASON

F 344/N Rat Male
 0 MG/KG

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

Cardiovascular System

Heart + + +
 Cardiomyopathy 2 1 2

Endocrine System

Adrenal Gland, Cortex + + +
 Adrenal Gland, Medulla + + +
 Islets, Pancreatic + + +
 Parathyroid Gland + + M
 Pituitary Gland + + +
 Pars Distalis, Angiectasis 1 1
 Pars Distalis, Hyperplasia 2 2
 Thyroid Gland + + +

General Body System

NONE

Genital System

Epididymis + + +
 Preputial Gland + + +
 Prostate + + +
 Seminal Vesicle + + +
 Testes + + +
 Interstit Cell, Hyperplasia 2 3 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

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|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 0 6 1 7 | 0 3 7 2 | 0 7 2 9 | 0 6 8 7 | 0 7 2 9 | 0 7 2 9 | 0 7 2 9 | 0 7 2 9 | 0 7 2 9 | 0 7 2 9 | 0 4 5 8 | 0 7 2 9 | 0 7 2 9 | 0 6 8 6 | 0 3 5 8 | 0 6 7 1 | 0 4 5 8 | 0 4 5 8 | 0 7 2 9 | 0 6 4 2 | 0 4 5 8 | 0 4 5 7 | 0 5 7 9 | 0 2 7 9 | 0 6 7 5 | 0 7 0 3 | 0 5 6 1 | 0 7 6 2 | | | | | | | | | | | | | | | | | | | |
| F 344/N Rat Male | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 MG/KG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interstit Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | 2 | 3 | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| Seminif Tub, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Spleen | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Thymus | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Skin | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | + | | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | | | | | |
| Fungus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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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|------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| F 344/N Rat Male | 6 | 3 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 6 | 3 | 5 | 6 | 4 | 4 | 7 | 6 | 4 | 4 | 4 | 5 | 7 | 6 | 7 | 5 | 6 | 7 |
| 0 MG/KG | 1 | 7 | 2 | 8 | 2 | 2 | 2 | 2 | 2 | 5 | 2 | 2 | 2 | 8 | 7 | 1 | 5 | 5 | 2 | 5 | 5 | 5 | 7 | 9 | 2 | 7 | 0 | 6 | 6 | 0 | |
| | 7 | 2 | 9 | 7 | 9 | 9 | 9 | 9 | 9 | 8 | 5 | 9 | 9 | 6 | 8 | 1 | 3 | 8 | 8 | 9 | 4 | 2 | 8 | 0 | 7 | 9 | 5 | 3 | 1 | 2 | 2 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ear | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

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I ..Insufficient tissue

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F 344/N Rat Male
0 MG/KG

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

Cardiovascular System

Heart + + + + + + +
 Cardiomyopathy 1 2 2 3 2 2

Endocrine System

Adrenal Gland, Cortex + + + + + + +
 Adrenal Gland, Medulla + + + + + + +
 Islets, Pancreatic + + + + + + +
 Parathyroid Gland + + + + + + +
 Pituitary Gland + + + + + + +
 Pars Distalis, Angiectasis 3
 Pars Distalis, Hyperplasia 2 2 1
 Thyroid Gland + + + + + + +

General Body System

NONE

Genital System

Epididymis + + + + + + +
 Preputial Gland + + + + + + +
 Prostate + + + + + + +
 Seminal Vesicle + + + + + + +
 Testes + + + + + + +
 Interstit Cell, Hyperplasia 2 2 1

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 I ..Insufficient tissue
 M ..Missing tissue
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F 344/N Rat Male
0 MG/KG

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

Interstit Cell, Hyperplasia
 Seminif Tub, Atrophy

2 2 1 3

Hematopoietic System

Bone Marrow
 Lymph Node, Mandibular
 Hyperplasia
 Lymph Node, Mesenteric
 Spleen
 Thymus

+ + + +
 + M + +
 2
 + + + +
 + + + +
 + + + M

+ +
 + +
 + +
 + +
 M +

Integumentary System

Mammary Gland
 Skin

+ + + +
 + + + +

M +
 + +

Musculoskeletal System

Bone

+ + + +

+ +

Nervous System

Brain

+ + + +

+ +

Respiratory System

Lung

+ + + +

+ +

Nose

+ + + +

+ +

Fungus

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

Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:23

First Dose M/F: NA / NA

Lab: TSI MASON

| | | 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 | 0 | 0 | 0 | 0 | | |
| F 344/N Rat Male | | 4 | 6 | 4 | 7 | 5 | 4 | 4 | 4 | 5 | 6 | 5 | 6 | 6 | 6 | 4 | 7 | 7 | 4 | 5 | 6 | 5 | 4 | 5 | 7 | 6 | 6 | 6 | 6 | | |
| | | 8 | 6 | 5 | 1 | 8 | 5 | 5 | 5 | 4 | 2 | 0 | 8 | 4 | 1 | 5 | 1 | 0 | 5 | 1 | 8 | 9 | 9 | 8 | 2 | 2 | 2 | 1 | 1 | 3 | |
| | 0 MG/KG | 5 | 0 | 8 | 0 | 6 | 8 | 8 | 8 | 9 | 8 | 5 | 4 | 1 | 7 | 8 | 5 | 3 | 8 | 4 | 4 | 2 | 8 | 0 | 5 | 9 | 8 | 7 | 9 | 9 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |
| Inflammation, Acute | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | + | | | + | + | + | | | | | + | | | | + | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ear | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | + | | | + | + | + | | | | | + | | | | + | | | | | | | | | | | | |
| Nephropathy | | | | | 2 | | | 2 | 2 | 2 | | | | | 3 | | | | | | | | | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | 1 | | | 1 | 1 | 1 | | | | | 1 | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | + | | | + | + | + | | | | | + | | | | | | | | | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:23
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
 0 MG/KG

ANIMAL ID

*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 | |
| Basophilic Focus | 2 | |
| Eosinophilic Focus | 1 | |
| Fatty Change, Focal | 10 | 1.2 |
| Hepatodiaphragmatic Nodule | 2 | |
| Mesentery | 3 | |
| Accessory Spleen | 1 | |
| Fat, Necrosis | 2 | 2.0 |
| Pancreas | 10 | |
| Acinus, Atrophy | 4 | 1.5 |
| Salivary Glands | 10 | |
| Duct, Metaplasia, Squamous | 3 | 1.0 |
| Stomach, Forestomach | 10 | |
| Stomach, Glandular | 10 | |

Cardiovascular System

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

+ ..Tissue examined microscopically

X ..Lesion present

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CAS Number: 147-47-7

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First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
0 MG/KG

| ANIMAL ID | *TOTALS | |
|-----------------------------|---------|-----|
| Heart | 10 | |
| Cardiomyopathy | 9 | 1.9 |
| Endocrine System | | |
| Adrenal Gland, Cortex | 10 | |
| Adrenal Gland, Medulla | 10 | |
| Islets, Pancreatic | 10 | |
| Parathyroid Gland | 9 | |
| Pituitary Gland | 10 | |
| Pars Distalis, Angiectasis | 3 | 1.7 |
| Pars Distalis, Hyperplasia | 5 | 1.8 |
| Thyroid Gland | 10 | |
| General Body System | | |
| NONE | | |
| Genital System | | |
| Epididymis | 10 | |
| Preputial Gland | 10 | |
| Prostate | 10 | |
| Seminal Vesicle | 10 | |
| Testes | 10 | |
| Interstit Cell, Hyperplasia | 6 | 1.8 |
| Seminif Tub, Atrophy | 1 | 3.0 |
| Hematopoietic 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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BLANK ..Not examined microscopically

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Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:23

First Dose M/F: NA / NA

Lab: TSI MASON

DAY ON TEST

**F 344/N Rat Male
0 MG/KG**

| | ANIMAL ID | *TOTALS | |
|-------------------------------|-----------|---------|-----|
| Bone Marrow | | 10 | |
| Lymph Node, Mandibular | | 9 | |
| Hyperplasia | | 1 | 2.0 |
| Lymph Node, Mesenteric | | 10 | |
| Spleen | | 10 | |
| Thymus | | 8 | |
| Integumentary System | | | |
| Mammary Gland | | 8 | |
| Skin | | 10 | |
| Musculoskeletal System | | | |
| Bone | | 10 | |
| Nervous System | | | |
| Brain | | 10 | |
| Respiratory System | | | |
| Lung | | 10 | |
| Nose | | 10 | |
| Fungus | | 1 | 2.0 |
| Inflammation, Acute | | 1 | 1.0 |
| Trachea | | 10 | |
| Special Senses System | | | |
| Ear | | 1 | |

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:23
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
0 MG/KG

ANIMAL ID

*TOTALS

Urinary System

| | | |
|-------------------------------------|----|-----|
| Kidney | 10 | |
| Nephropathy | 10 | 2.2 |
| Renal Tubule, Degeneration, Hyaline | 9 | 1.0 |
| Urinary Bladder | 10 | |
| Calculus Gross Observation | 1 | |
| Calculus Micro Observation Only | 1 | |

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

+ ..Tissue examined microscopically

X ..Lesion present

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Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:23
 First Dose M/F: NA / NA
 Lab: TSI MASON

F 344/N Rat Male
60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 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 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|--|---|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change, Focal | | | | 2 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Atrophy | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Metaplasia, Squamous | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|---|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Heart | | | + | | | | | | + | | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically M ..Missing tissue 1-4 ..Lesion qualified as:
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Test Type: CHRONIC

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

Time Report Requested: 01:39:24

Route: DERMAL,SOLUTION

CAS Number: 147-47-7

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: TSI MASON

F 344/N Rat Male
60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 6 | 4 | 6 | 5 | 5 | 7 | 6 | 4 | 6 | 4 | 5 | 4 | 6 | 6 | 6 | 5 | 5 | 4 | 5 | 3 | 7 | 4 | 6 | 6 | 6 | 6 | 4 | 7 | 6 | 7 |
| | 6 | 1 | 5 | 1 | 5 | 9 | 0 | 0 | 5 | 4 | 2 | 4 | 5 | 1 | 0 | 6 | 8 | 0 | 5 | 7 | 5 | 2 | 5 | 1 | 9 | 3 | 2 | 7 | 0 | 3 | 1 |
| | 4 | 7 | 8 | 7 | 2 | 7 | 1 | 6 | 8 | 8 | 1 | 8 | 8 | 9 | 0 | 8 | 3 | 5 | 8 | 9 | 1 | 8 | 8 | 9 | 6 | 5 | 7 | 0 | 1 | 5 | 6 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Adrenal Gland, Cortex | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Epididymis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seminal Vesicle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interstit Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hematopoietic 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: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:24
First Dose M/F: NA / NA
Lab: TSI MASON

| DAY ON TEST | F 344/N Rat Male 60 MG/KG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|---|
| | 0 6 6 4 | 0 6 6 7 | 0 4 1 8 | 0 6 5 7 | 0 5 1 2 | 0 5 9 7 | 0 7 0 1 | 0 6 0 6 | 0 4 5 8 | 0 6 4 8 | 0 4 2 1 | 0 5 1 8 | 0 6 1 9 | 0 6 8 0 | 0 5 0 5 | 0 4 8 3 | 0 5 5 5 | 0 3 7 1 | 0 7 2 8 | 0 4 1 9 | 0 6 3 6 | 0 6 2 5 | 0 6 7 7 | 0 6 3 2 | 0 4 7 0 | 0 7 0 1 | 0 6 3 5 | 0 7 1 6 | | |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

Hematopoietic System

| | | | | | | | | |
|------------------------|--|---|--|---|--|---|--|---|
| Bone Marrow | | + | | + | | + | | + |
| Lymph Node, Mandibular | | + | | + | | + | | + |
| Lymph Node, Mesenteric | | + | | + | | + | | + |
| Spleen | | + | | + | | + | | + |
| Thymus | | + | | + | | + | | + |

Integumentary System

| | | | | | | | | | | |
|---------------------------|--|---|--|---|--|---|--|---|--|---|
| Mammary Gland | | + | | + | | M | | + | | + |
| Skin | | + | | + | | + | | + | | + |
| Back, Acanthosis | | 1 | | 1 | | 1 | | 2 | | 1 |
| Cyst Epithelial Inclusion | | | | | | | | | | X |

Musculoskeletal System

| | | | | | | | | | | |
|------|--|---|--|---|--|---|--|---|--|---|
| Bone | | + | | + | | + | | + | | + |
|------|--|---|--|---|--|---|--|---|--|---|

Nervous System

| | | | | | | | | | | |
|-------|--|---|--|---|--|---|--|---|--|---|
| Brain | | + | | + | | + | | + | | + |
|-------|--|---|--|---|--|---|--|---|--|---|

Respiratory System

| | | | | | | | | | | |
|---------------------|--|---|--|---|--|---|--|---|--|---|
| Lung | | + | | + | | + | | + | | + |
| Nose | | + | | + | | + | | + | | + |
| Foreign Body | | | | | | | | | | |
| Inflammation, Acute | | | | | | | | | | |

* ..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: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:24

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|-----------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| F 344/N Rat Male | 60 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 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| | | 6 | 6 | 4 | 6 | 5 | 5 | 7 | 6 | 4 | 6 | 4 | 5 | 4 | 6 | 6 | 6 | 5 | 5 | 4 | 5 | 3 | 7 | 4 | 6 | 6 | 6 | 6 | 4 | 7 | 6 | 7 | | | | |
| | | ANIMAL ID | 6 | 1 | 5 | 1 | 5 | 9 | 0 | 0 | 5 | 4 | 2 | 4 | 5 | 1 | 0 | 6 | 8 | 0 | 5 | 7 | 5 | 2 | 5 | 1 | 9 | 3 | 2 | 7 | 0 | 3 | 1 | | | |
| | | | 4 | 7 | 8 | 7 | 2 | 7 | 1 | 6 | 8 | 8 | 1 | 8 | 8 | 9 | 0 | 8 | 3 | 5 | 8 | 9 | 1 | 8 | 8 | 9 | 6 | 5 | 7 | 0 | 1 | 5 | 6 | | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 0 | 1 | |
| Trachea | | | | | | + | | | | | + | | | | | | | | | | | | + | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | + | | | | | + | | | | | + | | | | | | | + | | | | | | | | | | | | | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | | + | | | | | + | | | | | + | | | | | | | + | | | | | | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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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Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:24
First Dose M/F: NA / NA
Lab: TSI MASON

F 344/N Rat Male
60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 4 | 5 | 6 | 4 | 5 | 6 | 6 | 4 | 5 | 5 | 7 | 6 | 4 | 6 | 4 | 4 | 7 | 7 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 7 | | |
| | 0 | 1 | 2 | 2 | 5 | 7 | 5 | 5 | 9 | 2 | 9 | 5 | 9 | 1 | 2 | 9 | 1 | 6 | 5 | 5 | 0 | 0 | 3 | 6 | 8 | 9 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 8 | 3 | 9 | 3 | 8 | 0 | 9 | 8 | 1 | 0 | 6 | 8 | 7 | 4 | 9 | 5 | 5 | 8 | 8 | 8 | 1 | 1 | 5 | 4 | 7 | 3 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Heart | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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

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Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:25
First Dose M/F: NA / NA
Lab: TSI MASON

F 344/N Rat Male
60 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 | 0 | 0 | 0 | 0 | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 4 | 5 | 6 | 4 | 5 | 6 | 6 | 4 | 5 | 5 | 7 | 6 | 4 | 6 | 4 | 4 | 7 | 7 | 5 | 5 | 6 | 6 | 5 | 5 | 6 |
| | 0 | 1 | 2 | 2 | 5 | 7 | 5 | 5 | 9 | 2 | 9 | 5 | 9 | 1 | 2 | 9 | 1 | 6 | 5 | 5 | 0 | 0 | 3 | 6 | 8 | 9 | 9 | 2 | 2 |
| | 8 | 3 | 9 | 3 | 8 | 0 | 9 | 8 | 1 | 0 | 6 | 8 | 7 | 4 | 9 | 5 | 5 | 8 | 8 | 8 | 1 | 1 | 5 | 4 | 7 | 3 | 7 | 6 | 7 |
| 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 | 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 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|--|--|---|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|
| Bone Marrow | | | | + | | + | | | | | + | | | | | | | | | + | | + | | | | | | | |
| Lymph Node, Mandibular | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Lymph Node, Mesenteric | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Spleen | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Thymus | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|--|--|---|--|---|--|--|--|--|---|---|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|
| Mammary Gland | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Skin | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Back, Acanthosis | | | | 1 | | | | | | | | 1 | | | | | | | | | 1 | | 1 | | | | | | |
| Cyst Epithelial Inclusion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|--|--|--|---|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|
| Bone | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
|------|--|--|--|---|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|--|--|--|---|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|
| Brain | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
|-------|--|--|--|---|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|

Respiratory System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--|--|--|---|--|---|--|--|---|--|---|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|
| Lung | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Nose | | | | + | | + | | | | | + | | | | | | | | | | + | | + | | | | | | |
| Foreign Body | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Acute | | | | 2 | | | | | 1 | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically M ..Missing tissue 1-4 ..Lesion qualified as:
X ..Lesion present A ..Autolysis precludes evaluation 1) Minimal 3) Moderate
I ..Insufficient tissue BLANK ..Not examined microscopically 2) Mild 4) Marked

Experiment Number: 05069-10
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 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

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 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:25
 First Dose M/F: NA / NA
 Lab: TSI MASON

**F 344/N Rat Male
 60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 4 | 5 | 6 | 4 | 5 | 6 | 6 | 4 | 5 | 5 | 7 | 6 | 4 | 6 | 4 | 4 | 7 | 7 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | |
| | 0 | 1 | 2 | 2 | 5 | 7 | 5 | 5 | 9 | 2 | 9 | 5 | 9 | 1 | 2 | 9 | 1 | 6 | 5 | 5 | 0 | 0 | 3 | 6 | 8 | 9 | 9 | 2 | 2 | |
| | 8 | 3 | 9 | 3 | 8 | 0 | 9 | 8 | 1 | 0 | 6 | 8 | 7 | 4 | 9 | 5 | 5 | 8 | 8 | 8 | 1 | 1 | 5 | 4 | 7 | 3 | 7 | 6 | 7 | |
| 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 | 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 | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:25
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
 60 MG/KG

ANIMAL ID

*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 | |
| Basophilic Focus | 1 | |
| Clear Cell Focus | 1 | |
| Fatty Change, Focal | 9 | 1.6 |
| Hepatodiaphragmatic Nodule | 1 | |
| Pancreas | 10 | |
| Acinus, Atrophy | 5 | 1.6 |
| Salivary Glands | 10 | |
| Duct, Metaplasia, Squamous | 7 | 1.0 |
| Stomach, Forestomach | 10 | |
| Stomach, Glandular | 10 | |

Cardiovascular System

| | | |
|----------------|----|-----|
| Heart | 10 | |
| Cardiomyopathy | 9 | 1.7 |

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Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
60 MG/KG

ANIMAL ID

*TOTALS

Endocrine System

| | | |
|----------------------------|----|-----|
| Adrenal Gland, Cortex | 10 | |
| Adrenal Gland, Medulla | 10 | |
| Islets, Pancreatic | 10 | |
| Parathyroid Gland | 8 | |
| Pituitary Gland | 10 | |
| Pars Distalis, Angiectasis | 1 | 2.0 |
| Pars Distalis, Cyst | 2 | |
| Pars Distalis, Hyperplasia | 4 | 2.0 |
| Thyroid Gland | 10 | |
| C Cell, Hyperplasia | 1 | 2.0 |

General Body System

NONE

Genital System

| | | |
|-----------------------------|----|-----|
| Epididymis | 10 | |
| Preputial Gland | 10 | |
| Prostate | 10 | |
| Seminal Vesicle | 10 | |
| Testes | 10 | |
| Interstit Cell, Hyperplasia | 5 | 1.8 |

Hematopoietic System

| | | |
|-------------|----|--|
| Bone Marrow | 10 | |
|-------------|----|--|

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

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Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:25
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
60 MG/KG

| ANIMAL ID | *TOTALS | |
|-------------------------------|---------|-----|
| Lymph Node, Mandibular | 10 | |
| Lymph Node, Mesenteric | 10 | |
| Spleen | 10 | |
| Thymus | 10 | |
| Integumentary System | | |
| Mammary Gland | 9 | |
| Skin | 10 | |
| Back, Acanthosis | 9 | 1.1 |
| Cyst Epithelial Inclusion | 1 | |
| Musculoskeletal System | | |
| Bone | 10 | |
| Nervous System | | |
| Brain | 10 | |
| Respiratory System | | |
| Lung | 10 | |
| Nose | 10 | |
| Foreign Body | 1 | 1.0 |
| Inflammation, Acute | 2 | 1.5 |
| Trachea | 10 | |
| Special Senses System | | |
| NONE | | |

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

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Experiment Number: 05069-10
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Route: DERMAL,SOLUTION
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:25
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
60 MG/KG

ANIMAL ID

*TOTALS

Urinary System

| | | |
|-------------------------------------|----|-----|
| Kidney | 10 | |
| Nephropathy | 10 | 2.0 |
| Renal Tubule, Degeneration, Hyaline | 6 | 1.0 |
| Urinary Bladder | 10 | |
| Calculus Gross Observation | 1 | |
| Calculus Micro Observation Only | 1 | |

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:26
 First Dose M/F: NA / NA
 Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|
| | ANIMAL ID | 6 | 7 | 6 | 6 | 6 | 4 | 4 | 6 | 6 | 7 | 6 | 4 | 4 | 4 | 5 | 6 | 7 | 6 | 7 | 6 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | | | | | | | | | | |
| | | 7 | 2 | 4 | 2 | 5 | 5 | 0 | 0 | 1 | 2 | 1 | 5 | 5 | 0 | 9 | 0 | 2 | 6 | 1 | 7 | 2 | 5 | 5 | 8 | 5 | 5 | 8 | 5 | 5 | 8 | 5 | 8 | 5 | 8 | 5 | 8 | | | | |
| | | 3 | 9 | 3 | 8 | 1 | 8 | 7 | 4 | 4 | 9 | 0 | 8 | 8 | 7 | 3 | 4 | 3 | 0 | 4 | 3 | 8 | 8 | 5 | 6 | 3 | 8 | 7 | 8 | 8 | 1 | 7 | 8 | 1 | 7 | 8 | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| Stomach, Forestomach | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Cortex | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | | | | | | | | M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:26

First Dose M/F: NA / NA

Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 6 | 7 | 6 | 6 | 6 | 4 | 4 | 6 | 6 | 7 | 6 | 4 | 4 | 4 | 5 | 6 | 7 | 6 | 7 | 6 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | | |
| ANIMAL ID | 3 | 9 | 3 | 8 | 1 | 8 | 7 | 4 | 4 | 9 | 0 | 8 | 8 | 7 | 3 | 4 | 3 | 0 | 4 | 3 | 8 | 8 | 5 | 5 | 8 | 6 | 3 | 8 | 7 | 8 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | |
| Preputial Gland | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seminal Vesicle | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interstit Cell, Hyperplasia | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | | | | | M | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back, Acanthosis | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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X ..Lesion present
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Species/Strain: Rat/F 344/N

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Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:26

First Dose M/F: NA / NA

Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 6 | 7 | 6 | 6 | 6 | 4 | 4 | 6 | 6 | 7 | 6 | 4 | 4 | 4 | 5 | 6 | 7 | 6 | 7 | 6 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | | |
| ANIMAL ID | 3 | 9 | 3 | 8 | 1 | 8 | 7 | 4 | 4 | 9 | 0 | 8 | 8 | 7 | 3 | 4 | 3 | 0 | 4 | 3 | 8 | 5 | 8 | 5 | 6 | 3 | 5 | 8 | 7 | 8 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | |
| Lung | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fungus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:26
 First Dose M/F: NA / NA
 Lab: TSI MASON

| | | 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 | 0 | 0 | 0 | 0 | |
| F 344/N Rat Male 100 MG/KG | ANIMAL ID | 6 | 7 | 3 | 6 | 6 | 6 | 6 | 5 | 7 | 4 | 4 | 6 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 7 | 4 | 5 | 7 | 5 | 6 |
| | 1 | 0 | 1 | 6 | 1 | 7 | 5 | 1 | 2 | 5 | 9 | 0 | 3 | 9 | 2 | 1 | 8 | 5 | 6 | 6 | 6 | 2 | 8 | 5 | 1 | 5 | 5 | 1 | 9 | 6 |
| | 4 | 2 | 5 | 7 | 4 | 0 | 5 | 1 | 9 | 8 | 2 | 4 | 3 | 3 | 7 | 2 | 1 | 1 | 5 | 1 | 0 | 8 | 8 | 0 | 8 | 7 | 7 | 7 | 7 | 7 |
| Stomach, Forestomach | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Stomach, Glandular | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Cardiovascular System | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Heart | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | |
| Cardiomyopathy | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Cortex | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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

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Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:27

First Dose M/F: NA / NA

Lab: TSI MASON

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

ANIMAL ID

Preputial Gland + + M

Prostate + + +

Seminal Vesicle + + +

Testes + + +

Interstit Cell, Hyperplasia 2 2 2

Hematopoietic System

Bone Marrow + + +

Lymph Node, Mandibular + + +

Lymph Node, Mesenteric + + +

Spleen + + +

Thymus + + +

Integumentary System

Mammary Gland + + M

Skin + + +

Back, Acanthosis 1 1

Musculoskeletal System

Bone + + +

Nervous System

Brain + + +

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

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Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:27
 First Dose M/F: NA / NA
 Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F 344/N Rat Male | 6 | 7 | 3 | 6 | 6 | 6 | 6 | 5 | 7 | 4 | 4 | 6 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 4 | 7 | 4 | 5 | 7 | 5 | 6 |
| 100 MG/KG | 1 | 0 | 1 | 6 | 1 | 7 | 5 | 1 | 2 | 5 | 9 | 0 | 3 | 9 | 2 | 1 | 8 | 5 | 6 | 6 | 2 | 8 | 5 | 1 | 5 | 1 | 9 | 6 |
| | 4 | 2 | 5 | 7 | 4 | 0 | 5 | 1 | 9 | 8 | 2 | 4 | 3 | 3 | 7 | 2 | 1 | 1 | 5 | 1 | 0 | 8 | 8 | 0 | 8 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Lung | | | | | | | | | | | + | | | | | | + | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | | + | | | | | | + | | | + | | | | | | | | |
| Fungus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | + | | | | | | + | | | + | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | + | | | | | | + | | | + | | | | | | | | |
| Nephropathy | | | | | | | | | | | 2 | | | | | | 2 | | | 3 | | | | | | | | |
| Renal Tubule, Degeneration, Hyaline | | | | | | | | | | | 1 | | | | | | 2 | | | 1 | | | | | | | | |
| Urinary Bladder | | | | | | | | | | | + | | | | | | + | | | + | | | | | | | | |
| Calculus Gross Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:27
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
 100 MG/KG

ANIMAL ID

*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 | | |
| Basophilic Focus | 3 | | |
| Fatty Change, Focal | 10 | 1.8 | |
| Hepatodiaphragmatic Nodule | 1 | | |
| Mixed Cell Focus | 1 | | |
| Necrosis | 1 | 1.0 | |
| Mesentery | 1 | | |
| Accessory Spleen | 1 | | |
| Pancreas | 10 | | |
| Acinus, Atrophy | 5 | 1.2 | |
| Acinus, Hyperplasia | 1 | 2.0 | |
| Salivary Glands | 10 | | |
| Duct, Metaplasia, Squamous | 4 | 1.0 | |
| Inflammation, Acute | 1 | 2.0 | |
| Stomach, Forestomach | 10 | | |

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First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
100 MG/KG

| | ANIMAL ID | | |
|------------------------------|-----------|----------------|-----|
| | | *TOTALS | |
| Stomach, Glandular | | 10 | |
| Cardiovascular System | | | |
| Heart | | 10 | |
| Cardiomyopathy | | 9 | 1.6 |
| Endocrine System | | | |
| Adrenal Gland, Cortex | | 10 | |
| Adrenal Gland, Medulla | | 10 | |
| Islets, Pancreatic | | 10 | |
| Parathyroid Gland | | 10 | |
| Pituitary Gland | | 9 | |
| Pars Distalis, Angiectasis | | 3 | 1.7 |
| Pars Distalis, Cyst | | 3 | |
| Pars Distalis, Hyperplasia | | 3 | 2.7 |
| Thyroid Gland | | 10 | |
| C Cell, Hyperplasia | | 1 | 3.0 |
| General Body System | | | |
| NONE | | | |
| Genital System | | | |
| Epididymis | | 10 | |
| Preputial Gland | | 9 | |
| Prostate | | 10 | |
| Seminal Vesicle | | 10 | |

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DAY ON TEST

F 344/N Rat Male
100 MG/KG

| | ANIMAL ID | | |
|-------------------------------|-----------|----------------|-----|
| | | *TOTALS | |
| Testes | | 10 | |
| Interstit Cell, Hyperplasia | | 9 | 1.9 |
| Hematopoietic System | | | |
| Bone Marrow | | 10 | |
| Lymph Node, Mandibular | | 10 | |
| Lymph Node, Mesenteric | | 10 | |
| Spleen | | 10 | |
| Thymus | | 9 | |
| Integumentary System | | | |
| Mammary Gland | | 6 | |
| Skin | | 10 | |
| Back, Acanthosis | | 8 | 1.0 |
| Musculoskeletal System | | | |
| Bone | | 10 | |
| Nervous System | | | |
| Brain | | 10 | |
| Respiratory System | | | |
| Lung | | 10 | |
| Hemorrhage | | 2 | 1.5 |
| Nose | | 10 | |
| Fungus | | 1 | 2.0 |

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Experiment Number: 05069-10
Test Type: CHRONIC
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Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:27
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Male
100 MG/KG

| ANIMAL ID | *TOTALS | |
|-------------------------------------|---------|-----|
| Inflammation, Acute | 1 | 2.0 |
| Trachea | 10 | |
| Special Senses System | | |
| NONE | | |
| Urinary System | | |
| Kidney | 10 | |
| Nephropathy | 10 | 2.3 |
| Renal Tubule, Degeneration, Hyaline | 10 | 1.2 |
| Urinary Bladder | 10 | |
| Calculus Gross Observation | 1 | |
| Calculus Micro Observation Only | 1 | |

END OF MALE DATA

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 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:28
 First Dose M/F: NA / NA
 Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | 6 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | 7 | 7 | 3 | 4 | 4 | 4 | 6 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 4 | 4 | 7 | 7 | 3 | 3 | 8 | 4 | 3 | |
| 0 MG/KG | 8 | 3 | 5 | 3 | 1 | 3 | 0 | 0 | 3 | 3 | 1 | 6 | 5 | 5 | 5 | 7 | 3 | 3 | 7 | 8 | 6 | 3 | 3 | 2 | 5 | 2 | 3 | 3 | 8 | 4 | 3 | | |
| | 8 | 6 | 3 | 6 | 4 | 6 | 7 | 3 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 1 | 6 | 6 | 4 | 6 | 5 | 6 | 6 | 9 | 7 | 8 | 6 | 6 | 2 | 4 | 6 | | |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 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 | 2 | | |
| | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Lymph Node, Mesenteric | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cortex, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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 Species/Strain: Rat/F 344/N

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 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
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 First Dose M/F: NA / NA
 Lab: TSI MASON

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

Nephropathy
 Urinary Bladder

1 1 1
 + + +
 1
 +

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:28
First Dose M/F: NA / NA
Lab: TSI MASON

| F 344/N Rat Female 0 MG/KG | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 6 | 4 | 5 | 4 | 4 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 7 | 7 | 7 | 4 | 5 | 6 | 6 | 4 | 4 | 7 | 6 | 4 | 7 | 0 |
| 3 | 5 | 6 | 5 | 7 | 3 | 4 | 3 | 8 | 3 | 5 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 0 | 2 | 7 | 5 | 9 | 5 | 5 | 1 | 2 | 5 | 3 | |
| 8 | 7 | 1 | 7 | 5 | 6 | 0 | 3 | 2 | 6 | 7 | 6 | 6 | 1 | 0 | 5 | 5 | 5 | 5 | 7 | 5 | 6 | 8 | 7 | 7 | 6 | 2 | 7 | 5 | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|---|--|---|--|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|---|---|---|---|---|---|
| Esophagus | | + | | | | + | | | | | | | | | | | | | | | | + | + | | + | | |
| Intestine Large, Cecum | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Intestine Large, Colon | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Intestine Large, Rectum | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Intestine Small, Duodenum | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Intestine Small, Ileum | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Intestine Small, Jejunum | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Liver | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Basophilic Focus | | | | X | | X | | | | | | | | X | | | | | | | | | | X | X | | X |
| Mixed Cell Focus | | | | | | X | | | | | | | | | | | | | | | | | | X | | | |
| Pancreas | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Salivary Glands | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Stomach, Forestomach | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Stomach, Glandular | | + | | + | | | | | | | | | | | | | | | | | | | + | + | | + | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|---|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|---|--|---|
| Heart | | + | | + | | | | | | | | | | | | | | | | | | | | + | + | | + |
| Cardiomyopathy | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | 1 | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:28
First Dose M/F: NA / NA
Lab: TSI MASON

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

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|---|--|---|--|---|---|---|--|---|---|--|--|--|---|--|--|--|--|--|--|--|---|---|---|---|---|---|
| Adrenal Gland, Cortex | | + | | + | | | | | | + | | | | | | | | | | | | | + | + | | | + | |
| Adrenal Gland, Medulla | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Islets, Pancreatic | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Parathyroid Gland | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Pituitary Gland | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Pars Distalis, Angiectasis | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | X | | | | | | | | | | | | | | | | | | X | X | | X |
| Pars Distalis, Hyperplasia | | | | | | | | 2 | | | | | | | | | | | | | | | | | 2 | 2 | | |
| Pars Intermed, Cyst | | | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| Thyroid Gland | | + | | + | | | | | | | + | | | | | | | | | | | | | | + | + | | + |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|---|--|---|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|--|---|
| Clitoral Gland | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Ovary | | + | | + | | | | | | + | | | | | | | | | | | | | | | + | + | | + |
| Uterus | | + | | + | | | | | | + | | | | | | | | | | | | | | | + | + | | + |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|---|--|---|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|--|---|
| Bone Marrow | | + | | + | | | | | | + | | | | | | | | | | | | | | + | + | | | + |
| Lymph Node, Mandibular | | + | | + | | | | | | + | | | | | | | | | | | | | | | + | + | | + |
| Lymph Node, Mesenteric | | + | | + | | | | | | + | | | | | | | | | | | | | | | + | + | | + |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:28
 First Dose M/F: NA / NA
 Lab: TSI MASON

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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6 | 4 | 5 | 4 | 4 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 4 | 5 | 6 | 6 | 4 | 4 | 7 | 6 | 4 | 7 | | |
| | 3 | 5 | 6 | 5 | 7 | 3 | 4 | 3 | 8 | 3 | 5 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 0 | 2 | 7 | 5 | 9 | 5 | 5 | 1 | 2 | 5 | 3 | |
| | 8 | 7 | 1 | 7 | 5 | 6 | 0 | 3 | 2 | 6 | 7 | 6 | 6 | 1 | 0 | 5 | 5 | 5 | 5 | 7 | 5 | 6 | 8 | 7 | 7 | 6 | 2 | 7 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| Lymph Node, Mesenteric | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cortex, Mineralization | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:28

First Dose M/F: NA / NA

Lab: TSI MASON

**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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 4 | 5 | 4 | 4 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 4 | 5 | 6 | 6 | 4 | 4 | 7 | 6 | 4 | 7 |
| | 3 | 5 | 6 | 5 | 7 | 3 | 4 | 3 | 8 | 3 | 5 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 0 | 2 | 7 | 5 | 9 | 5 | 5 | 1 | 2 | 5 | 3 |
| | 8 | 7 | 1 | 7 | 5 | 6 | 0 | 3 | 2 | 6 | 7 | 6 | 6 | 1 | 0 | 5 | 5 | 5 | 5 | 7 | 5 | 6 | 8 | 7 | 7 | 6 | 2 | 7 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Nephropathy | | | 1 | | | 1 | | | | | | 1 | | | | | | | | | | | | 1 | 1 | | | 1 | |
| Urinary Bladder | | | + | | | + | | | | | | + | | | | | | | | | | | | + | + | | | + | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
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Experiment Number: 05069-10
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 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

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 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:28
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
 0 MG/KG

ANIMAL ID

*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 | | |
| Basophilic Focus | 10 | | |
| Mixed Cell Focus | 2 | | |
| Pancreas | 10 | | |
| Acinus, Atrophy | 2 | 1.5 | |
| Salivary Glands | 10 | | |
| Stomach, Forestomach | 10 | | |
| Stomach, Glandular | 10 | | |
| Erosion | 1 | 1.0 | |
| Hyperplasia | 1 | 1.0 | |
| Metaplasia | 1 | 1.0 | |

Cardiovascular System

| | | | |
|----------------|----|-----|--|
| Heart | 10 | | |
| Cardiomyopathy | 6 | 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

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Species/Strain: Rat/F 344/N

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First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
0 MG/KG

ANIMAL ID

*TOTALS

Endocrine System

| | | |
|----------------------------|----|-----|
| Adrenal Gland, Cortex | 10 | |
| Adrenal Gland, Medulla | 10 | |
| Islets, Pancreatic | 10 | |
| Parathyroid Gland | 10 | |
| Pituitary Gland | 10 | |
| Pars Distalis, Angiectasis | 2 | 2.0 |
| Pars Distalis, Cyst | 8 | |
| Pars Distalis, Hyperplasia | 8 | 1.6 |
| Pars Intermed, Cyst | 1 | |
| Thyroid Gland | 10 | |

General Body System

NONE

Genital System

| | | |
|----------------|----|--|
| Clitoral Gland | 10 | |
| Ovary | 10 | |
| Uterus | 10 | |

Hematopoietic System

| | | |
|------------------------|----|--|
| Bone Marrow | 10 | |
| Lymph Node, Mandibular | 10 | |
| Lymph Node, Mesenteric | 10 | |
| Spleen | 10 | |

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 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
0 MG/KG

| ANIMAL ID | *TOTALS | |
|-------------------------------|---------|-----|
| Thymus | 10 | |
| Integumentary System | | |
| Mammary Gland | 10 | |
| Skin | 10 | |
| Musculoskeletal System | | |
| Bone | 10 | |
| Nervous System | | |
| Brain | 10 | |
| Respiratory System | | |
| Lung | 10 | |
| Nose | 10 | |
| Trachea | 10 | |
| Special Senses System | | |
| NONE | | |
| Urinary System | | |
| Kidney | 10 | |
| Cortex, Mineralization | 10 | 1.1 |
| Nephropathy | 10 | 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: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:29

First Dose M/F: NA / NA

Lab: TSI MASON

F 344/N Rat Female 60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 4 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 4 | 7 | 7 | 7 | 4 | 2 | 2 | 4 | 7 | 6 | 5 | 6 |
| | 3 | 4 | 0 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 5 | 3 | 3 | 0 | 4 | 5 | 3 | 5 | 0 | 5 | 2 | 7 | |
| | 5 | 9 | 5 | 5 | 5 | 8 | 7 | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 9 | 3 | 5 | 5 | 7 | 5 | 5 | 9 | 4 | 6 | 2 | 7 | 7 | 2 | 6 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|--|--|---|---|--|---|--|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|--|---|---|
| Adrenal Gland, Cortex | | | | | | | | | | + | + | | | | | | | | | + | | | | | | | | | | | | + |
| Adrenal Gland, Medulla | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Islets, Pancreatic | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Parathyroid Gland | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Pituitary Gland | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | 1 | |
| Pars Distalis, Cyst | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | X | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Thyroid Gland | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Follicle, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Ovary | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |
| Lymph Node, Mandibular | | | | | | | | | | + | + | | | | | | | | | | + | | | | | | | | | | | + |

* ..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: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:29
First Dose M/F: NA / NA
Lab: TSI MASON

**F 344/N Rat Female
60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 4 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 4 | 7 | 7 | 7 | 4 | 2 | 2 | 4 | 7 | 6 | 5 | 6 | | | | | | |
| | 3 | 4 | 0 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 5 | 3 | 3 | 0 | 4 | 5 | 3 | 5 | 0 | 5 | 2 | 7 | | | | | | |
| | 5 | 9 | 5 | 5 | 5 | 8 | 7 | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 9 | 3 | 5 | 5 | 7 | 5 | 5 | 9 | 4 | 6 | 2 | 7 | 7 | 2 | 6 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 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 |
| | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|--|--|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lymph Node, Mesenteric | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back, Acanthosis | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/21/2014

Test Type: CHRONIC

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

Time Report Requested: 01:39:29

Route: DERMAL,SOLUTION

CAS Number: 147-47-7

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: TSI MASON

| F 344/N Rat Female 60 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 6 | 7 | 7 | 7 | 7 | 4 | 4 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 4 | 7 | 7 | 7 | 4 | 2 | 2 | 4 | 7 | 6 | 5 | 6 |
| 3 | 4 | 0 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 5 | 3 | 3 | 0 | 4 | 5 | 3 | 5 | 0 | 5 | 2 | 7 | |
| 5 | 9 | 5 | 5 | 5 | 8 | 7 | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 9 | 3 | 5 | 5 | 7 | 5 | 5 | 9 | 4 | 6 | 2 | 7 | 7 | 2 | 6 | 5 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | 2 | 2 | 2 | 2 | 2 | |
| 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |

Cortex, Mineralization

2 1

1

2

Nephropathy

1 1

2

Urinary Bladder

+ +

+

+

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

+ ..Tissue examined microscopically

M ..Missing tissue

1-4 ..Lesion qualified as:

X ..Lesion present

A ..Autolysis precludes evaluation

1) Minimal 3) Moderate

I ..Insufficient tissue

BLANK ..Not examined microscopically

2) Mild 4) Marked

Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:30
 First Dose M/F: NA / NA
 Lab: TSI MASON

**F 344/N Rat Female
 60 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 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 4 | 7 | 7 | 7 | 4 | 4 | 4 | 7 | 4 | 7 | 4 | 4 | 7 | 7 | 7 | 7 | 4 | 4 | 6 | 7 | 7 | 3 | 6 | 7 | 7 | 4 | 7 | 7 | | |
| | 5 | 3 | 3 | 3 | 9 | 5 | 5 | 3 | 5 | 3 | 5 | 2 | 3 | 0 | 3 | 3 | 7 | 5 | 7 | 8 | 3 | 3 | 8 | 3 | 3 | 3 | 8 | 3 | 3 | |
| | 7 | 5 | 5 | 5 | 4 | 7 | 7 | 5 | 7 | 5 | 7 | 2 | 5 | 9 | 5 | 5 | 7 | 7 | 8 | 5 | 5 | 5 | 6 | 5 | 5 | 8 | 5 | 5 | 9 | |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 7 | 8 | 9 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Adrenal Gland, Cortex | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | 2 | 1 | | | | | 2 | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | | | | | | | X | | X | | X | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | 2 | 2 | | | 2 | | 3 | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | | | | | + | + | | | + | | | | | | | | | | | | | | | | | | | | |
| Follicle, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | | | | | + | + | | | + | | + | | | | | | | | | | | | | | | | | | |
| Ovary | + | | | | | + | + | | | + | | + | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | X | | X | | | | | | | | | | | | | | | | | |
| Uterus | + | | | | | + | + | | | + | | + | | | | | | | | | | | | | | | | | | |
| Dilatation | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | | | | | + | + | | | + | | + | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | | | | | + | + | | | + | | + | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:30
 First Dose M/F: NA / NA
 Lab: TSI MASON

**F 344/N Rat Female
 60 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 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 4 | 7 | 7 | 7 | 4 | 4 | 4 | 7 | 4 | 7 | 4 | 4 | 7 | 7 | 7 | 7 | 4 | 4 | 6 | 7 | 7 | 3 | 6 | 7 | 7 | 4 | 7 | 7 | |
| | 5 | 3 | 3 | 3 | 9 | 5 | 5 | 3 | 5 | 3 | 5 | 2 | 3 | 0 | 3 | 3 | 7 | 5 | 8 | 3 | 3 | 8 | 3 | 3 | 3 | 8 | 3 | 3 | |
| | 7 | 5 | 5 | 5 | 4 | 7 | 7 | 5 | 7 | 5 | 7 | 2 | 5 | 9 | 5 | 5 | 7 | 7 | 8 | 5 | 5 | 5 | 6 | 5 | 5 | 8 | 5 | 9 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Lymph Node, Mesenteric | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Spleen | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Thymus | + | | | | | + | M | | + | + | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Skin | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Back, Acanthosis | 1 | | | | | | | 1 | | 1 | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Nose | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Trachea | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | | | | | + | + | | + | + | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:30
First Dose M/F: NA / NA
Lab: TSI MASON

F 344/N Rat Female
60 MG/KG

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---|--|
| | 0 4 | 0 7 | 0 7 | 0 7 | 0 4 | 0 4 | 0 4 | 0 7 | 0 4 | 0 7 | 0 4 | 0 4 | 0 7 | 0 7 | 0 7 | 0 4 | 0 4 | 0 6 | 0 7 | 0 7 | 0 3 | 0 6 | 0 7 | 0 7 | 0 4 | 0 7 | 0 7 | 0 6 | | |
| 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 | |
| Cortex, Mineralization | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nephropathy | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Urinary Bladder | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| | 1 | | | | 1 | 1 | | 2 | | 1 | | | | | | | | 1 | | | | | | | | | | | | |
| | 1 | | | | 2 | 1 | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | |
| | + | | | | + | + | | + | | + | | | | | | | | + | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

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

Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:30
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
60 MG/KG

| ANIMAL ID | *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 | |
| Basophilic Focus | 9 | |
| Clear Cell Focus | 1 | |
| Eosinophilic Focus | 1 | |
| Pancreas | 10 | |
| Acinus, Atrophy | 6 | 1.7 |
| Salivary Glands | 10 | |
| Stomach, Forestomach | 10 | |
| Stomach, Glandular | 10 | |
| Cardiovascular System | | |
| Heart | 10 | |
| Cardiomyopathy | 5 | 1.4 |
| Endocrine System | | |
| Adrenal Gland, Cortex | 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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:30
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
 60 MG/KG

ANIMAL ID

*TOTALS

| | | | |
|-----------------------------|----|-----|--|
| Adrenal Gland, Medulla | 10 | | |
| Islets, Pancreatic | 10 | | |
| Parathyroid Gland | 10 | | |
| Pituitary Gland | 10 | | |
| Pars Distalis, Angiectasis | 5 | 1.6 | |
| Pars Distalis, Cyst | 6 | | |
| Pars Distalis, Hyperplasia | 6 | 2.2 | |
| Thyroid Gland | 10 | | |
| Follicle, Cyst | 1 | | |
| General Body System | | | |
| NONE | | | |
| Genital System | | | |
| Clitoral Gland | 10 | | |
| Ovary | 10 | | |
| Cyst | 2 | | |
| Uterus | 10 | | |
| Dilatation | 1 | 2.0 | |
| Hematopoietic System | | | |
| Bone Marrow | 10 | | |
| Lymph Node, Mandibular | 10 | | |
| Lymph Node, Mesenteric | 10 | | |
| Spleen | 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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:30
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
60 MG/KG

| ANIMAL ID | *TOTALS | |
|-------------------------------|---------|-----|
| Thymus | 9 | |
| Integumentary System | | |
| Mammary Gland | 10 | |
| Skin | 10 | |
| Back, Acanthosis | 5 | 1.0 |
| Musculoskeletal System | | |
| Bone | 10 | |
| Nervous System | | |
| Brain | 10 | |
| Respiratory System | | |
| Lung | 10 | |
| Nose | 10 | |
| Trachea | 10 | |
| Special Senses System | | |
| NONE | | |
| Urinary System | | |
| Kidney | 10 | |
| Cortex, Mineralization | 10 | 1.3 |
| Nephropathy | 8 | 1.3 |
| 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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:30
 First Dose M/F: NA / NA
 Lab: TSI MASON

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

Alimentary System

| | | | | | | |
|-----------------------------------|---|--|---|---|---|---|
| Esophagus | + | | + | | + | + |
| Intestine Large, Cecum | + | | + | | + | + |
| Intestine Large, Colon | + | | + | | + | + |
| Intestine Large, Rectum | + | | + | | + | + |
| Intestine Small, Duodenum | + | | + | | + | + |
| Intestine Small, Ileum | + | | + | | + | + |
| Intestine Small, Jejunum | + | | + | | + | + |
| Liver | + | | + | | + | + |
| Basophilic Focus | X | | X | | X | |
| Clear Cell Focus | | | | | | X |
| Eosinophilic Focus | | | | | | X |
| Hepatodiaphragmatic Nodule | | | | | | X |
| Mesentery | | | + | | | |
| Fat, Inflammation, Chronic Active | | | | | | |
| Fat, Necrosis | | | | 2 | | |
| Pancreas | + | | + | | + | + |
| Acinus, Atrophy | 2 | | | | | |
| Salivary Glands | + | | + | | + | + |
| Stomach, Forestomach | + | | + | | + | + |
| Stomach, Glandular | + | | + | | + | + |

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

Experiment Number: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:31

First Dose M/F: NA / NA

Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 4 | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 4 | 6 | 5 | 4 | 4 | 7 | 4 | 6 | 7 | 1 | 6 | 4 | 7 | 7 | 6 | 7 | 5 | 6 | 7 | 6 | 5 | 7 | 6 | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 6 | 5 | 5 | 5 | 8 | 8 | 5 | 7 | 6 | 7 | 7 | 5 | 4 | 9 | 5 | 6 | 2 | 4 | 6 | 5 | 8 | 5 | 7 | 5 | 5 | 2 | 6 | 4 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Heart | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Cortex | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | X | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | 1 | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | | | | | | | | | + | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:31
 First Dose M/F: NA / NA
 Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ANIMAL ID | 4 | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 4 | 6 | 5 | 4 | 4 | 7 | 4 | 6 | 7 | 1 | 6 | 4 | 7 | 7 | 6 | 7 | 5 | 6 | 7 | 6 | 5 | 7 | 6 |
| | | 5 | 6 | 3 | 3 | 3 | 6 | 2 | 3 | 5 | 8 | 0 | 5 | 5 | 3 | 6 | 9 | 3 | 9 | 2 | 1 | 0 | 3 | 4 | 3 | 1 | 1 | 3 | 8 | 4 | 3 | 3 |
| | | 7 | 6 | 5 | 5 | 5 | 8 | 8 | 5 | 7 | 6 | 7 | 7 | 5 | 4 | 9 | 5 | 6 | 2 | 4 | 6 | 5 | 8 | 5 | 7 | 5 | 5 | 2 | 6 | 5 | 0 | |
| Bone Marrow | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mandibular | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mesenteric | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Spleen | | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Thymus | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back, Acanthosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically M ..Missing tissue 1-4 ..Lesion qualified as:
 X ..Lesion present A ..Autolysis precludes evaluation 1) Minimal 3) Moderate
 I ..Insufficient tissue BLANK ..Not examined microscopically 2) Mild 4) Marked

Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:31
 First Dose M/F: NA / NA
 Lab: TSI MASON

| F 344/N Rat Female 100 MG/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| | 0 7 | 0 4 | 0 4 | 0 7 | 0 4 | 0 7 | 0 7 | 0 4 | 0 4 | 0 7 | 0 7 | 0 6 | 0 4 | 0 7 | 0 5 | 0 7 | 0 6 | 0 7 | 0 6 | 0 4 | 0 6 | 0 7 | 0 6 | 0 6 | 0 7 | 0 6 | 0 5 | 0 7 | 0 7 | |
| 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 | 0 0 | 0 0 | 0 0 | |
| Heart | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | 1 | 2 | | 2 | | | | | 1 | | | | 1 | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Gland, Cortex | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Adrenal Gland, Medulla | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Pituitary Gland | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Pars Distalis, Angiectasis | | 2 | 2 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Cyst | | X | | | | | | | | X | | | | X | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | 2 | | | 3 | | | | | 3 | | | | 2 | | | | | | | | | | | | | | | | |
| Thyroid Gland | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Ovary | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Cyst | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | | + | | | | | + | | | | + | | | | | | | | | | | | | | | | |

* ..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: 05069-10

Test Type: CHRONIC

Route: DERMAL,SOLUTION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)

CAS Number: 147-47-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:39:31

First Dose M/F: NA / NA

Lab: TSI MASON

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 7 | 4 | 4 | 7 | 4 | 7 | 7 | 4 | 4 | 7 | 7 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 5 | 7 | 7 | |
| | 3 | 5 | 5 | 3 | 5 | 3 | 3 | 5 | 5 | 3 | 1 | 1 | 5 | 3 | 6 | 2 | 4 | 3 | 6 | 5 | 2 | 3 | 3 | 8 | 3 | 8 | 8 | 3 | 1 | |
| | 5 | 7 | 7 | 5 | 7 | 5 | 5 | 0 | 7 | 5 | 6 | 9 | 7 | 5 | 3 | 8 | 2 | 5 | 8 | 7 | 5 | 5 | 1 | 5 | 5 | 2 | 0 | 5 | 2 | |
| Bone Marrow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mandibular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mesenteric | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Spleen | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | |
| Thymus | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Skin | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Back, Acanthosis | | 1 | 1 | | 1 | | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Nose | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Trachea | | + | + | | + | | | | + | | | | + | | | | | + | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:32
First Dose M/F: NA / NA
Lab: TSI MASON

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

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|--|--|--|---|---|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | + | + | + | | | | | + | | | | | | | | | | | | | | | | | | | | | |
| Cortex, Mineralization | 2 | 1 | | 1 | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 | 2 | | 1 | | | | | 1 | | | | | | 1 | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | | + | | | | | + | | | | | | + | | | | | | | | | | | | | | |

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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: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:32
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
 100 MG/KG

ANIMAL ID

*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 | |
| Basophilic Focus | 8 | |
| Clear Cell Focus | 2 | |
| Eosinophilic Focus | 1 | |
| Hepatodiaphragmatic Nodule | 3 | |
| Mesentery | 2 | |
| Fat, Inflammation, Chronic Active | 1 | 3.0 |
| Fat, Necrosis | 1 | 2.0 |
| Pancreas | 10 | |
| Acinus, Atrophy | 2 | 1.5 |
| Salivary Glands | 10 | |
| Stomach, Forestomach | 10 | |
| Stomach, Glandular | 10 | |

Cardiovascular System

| | | |
|-------|----|--|
| Heart | 10 | |
|-------|----|--|

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M ..Missing tissue

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2) Mild 4) Marked

Experiment Number: 05069-10
 Test Type: CHRONIC
 Route: DERMAL,SOLUTION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:32
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
 100 MG/KG

| ANIMAL ID | *TOTALS | |
|-----------------------------|---------|-----|
| Cardiomyopathy | 8 | 1.5 |
| Endocrine System | | |
| Adrenal Gland, Cortex | 10 | |
| Adrenal Gland, Medulla | 10 | |
| Islets, Pancreatic | 10 | |
| Parathyroid Gland | 10 | |
| Pituitary Gland | 10 | |
| Pars Distalis, Angiectasis | 5 | 1.8 |
| Pars Distalis, Cyst | 7 | |
| Pars Distalis, Hyperplasia | 7 | 2.0 |
| Thyroid Gland | 10 | |
| General Body System | | |
| NONE | | |
| Genital System | | |
| Clitoral Gland | 10 | |
| Ovary | 10 | |
| Cyst | 1 | |
| Uterus | 10 | |
| Hematopoietic System | | |
| Bone Marrow | 10 | |
| Lymph Node, Mandibular | 10 | |
| Lymph Node, Mesenteric | 10 | |

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+ ..Tissue examined microscopically

X ..Lesion present

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 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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 CAS Number: 147-47-7

Date Report Requested: 10/21/2014
 Time Report Requested: 01:39:32
 First Dose M/F: NA / NA
 Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
100 MG/KG

| ANIMAL ID | *TOTALS | |
|-------------------------------|---------|-----|
| Spleen | 10 | |
| Thymus | 10 | |
| Integumentary System | | |
| Mammary Gland | 10 | |
| Skin | 10 | |
| Back, Acanthosis | 6 | 1.0 |
| Musculoskeletal System | | |
| Bone | 10 | |
| Nervous System | | |
| Brain | 10 | |
| Respiratory System | | |
| Lung | 10 | |
| Nose | 10 | |
| Trachea | 10 | |
| Special Senses System | | |
| Eye | 1 | |
| Lens, Cataract | 1 | 2.0 |
| Urinary System | | |
| Kidney | 10 | |
| Cortex, Mineralization | 10 | 1.2 |
| Cyst | 1 | |

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Experiment Number: 05069-10
Test Type: CHRONIC
Route: DERMAL,SOLUTION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dihydro-2,2,4-trimethylquinoline (monomer)
CAS Number: 147-47-7

Date Report Requested: 10/21/2014
Time Report Requested: 01:39:32
First Dose M/F: NA / NA
Lab: TSI MASON

DAY ON TEST

F 344/N Rat Female
100 MG/KG

ANIMAL ID

*TOTALS

| | | |
|-----------------|----|-----|
| Nephropathy | 10 | 1.2 |
| Urinary Bladder | 10 | |

**** END OF REPORT ****

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

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