Experiment Number: 95003-03
Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Compound:** Methyl trans-styryl ketone **CAS Number:** 1896-62-4

I ah

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:21

First Dose M/F: NA / NA

Lab: MBA

C Number: C95003

**Lock Date:** 01/08/2003

Cage Range: All

Date Range: All

Reasons For Removal:

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**Alimentary System** 

CAS Number: 1896-62-4

Lab: MBA

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:21

| F 344/N Rat Male       |
|------------------------|
| <b>VEHICLE CONTROL</b> |

| F 344/N Rat Male<br>/EHICLE CONTROL | DAY ON TEST  ANIMAL ID | 0<br>9<br>3<br>0<br>0<br>0<br>0 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>2 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>3 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>4 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>5 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>6 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>7 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>8 | 0<br>9<br>3<br>0<br>0<br>0<br>0<br>9 | 0<br>9<br>3<br>0<br>0<br>0<br>1<br>0 | *TO | та | LS  |  |
|-------------------------------------|------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----|----|-----|--|
| 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  |    |     |  |
| Vacuolization Cytoplasmic           |                        |                                 | 1                                    | 1                                    |                                      |                                      |                                      |                                      |                                      | 1                                    |                                      |     | 3  | 1.0 |  |
| Pancreas                            |                        | +                               | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |  |
| Salivary Glands                     |                        | +                               | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |  |
| Stomach, Forestomach                |                        | +                               | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |  |
| Cyst Epithelial Inclusion           |                        |                                 |                                      |                                      |                                      |                                      |                                      | Χ                                    |                                      |                                      |                                      |     | 1  |     |  |
| Stomach, Glandular                  |                        | +                               | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |  |
| Tongue                              |                        | +                               | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |  |
|                                     |                        |                                 |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |     |    |     |  |

# **Cardiovascular System**

| Blood Vessel                                | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Heart                                       | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| Artery, Inflammation, Chronic Active, Focal |   |   | 1 |   |   |   |   |   |   |   |    | 1 | 1.0 |
| Cardiomyopathy                              |   |   |   |   | 1 |   |   |   |   |   |    | 1 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

Test Type: 90-DAY

**Endocrine System** 

Thyroid Gland **General Body System** 

NONE **Genital System** 

**Testes** 

Seminal Vesicle

**Bone Marrow** 

Lymph Node

**Hematopoietic System** 

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Time Report Requested: 07:35:21 Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Lab: MBA

F 344/N Rat Male **VEHICLE CONTROL** 

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

| 344/N Rat Male<br>EHICLE CONTROL | DAY ON TEST | 0<br>0<br>9<br>3<br>0<br>0 |     |    |     |   |
|----------------------------------|-------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----|----|-----|---|
|                                  |             | 0<br>1                     | 0<br>2                     | 0<br>3                     | 0<br>4                     | 0<br>5                     | 0<br>6                     | 0<br>7                     | 0<br>8                     | 0                          | 1<br>0                     | *TO | TΑ | LS  | _ |
| ndocrine System                  |             |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |     |    |     |   |
| Adrenal Cortex                   |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
| Adrenal Medulla                  |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
| Islets, Pancreatic               |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
| Parathyroid Gland                |             | М                          | +                          | +                          | +                          | М                          | М                          | М                          | М                          | +                          | М                          | 4   |    |     |   |
| Pituitary Gland                  |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | I                          | +                          | +                          | 9   |    |     |   |
| Pars Distalis, Hyperplasia,      | Focal       |                            |                            |                            |                            | 1                          |                            |                            |                            |                            |                            |     | 1  | 1.0 | ) |
| Thyroid Gland eneral Body System |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
|                                  |             |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |     |    |     |   |
| NONE                             |             |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |     |    |     |   |
| enital System                    |             |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |     |    |     |   |
| Epididymis                       |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
| Preputial Gland                  |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |
| Prostate                         |             | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | +                          | 10  |    |     |   |

+ 2

M M

M M

Lymph Node, Mandibular

Mediastinal, Hyperplasia, Lymphoid

M .. Missing tissue

M M M M M

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

10

10

10

0

1 2.0

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X .. Lesion present

I .. Insufficient tissue

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

Lab: MBA

1-4 ..Lesion qualified as:

2) Mild

1) Minimal 3) Moderate

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:21

First Dose M/F: NA / NA

| F 344/N Rat Male<br>VEHICLE CONTROL  | ANIMAL ID         | 0<br>9<br>3<br>0<br>0<br>0 | 0<br>9<br>3<br>0<br>0 |     |    |     |
|--------------------------------------|-------------------|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----|----|-----|
|                                      |                   | 0                          | 0 2                   | 0                     | 0                     | 0                     | 0                     | 0<br>7                | 0                     | 0                     | 1 0                   | *TO | ТА | LS  |
| Lymph Node, Mandibular               |                   | М                          | М                     | М                     | М                     | М                     | М                     | М                     | М                     | М                     | М                     | 0   |    |     |
| Lymph Node, Mesenteric               |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Spleen                               |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Thymus                               |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Atrophy                              |                   |                            | 1                     |                       |                       |                       | 1                     |                       |                       |                       |                       |     | 2  | 1.0 |
| Integumentary System                 |                   |                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |    |     |
| Mammary Gland                        |                   | М                          | М                     | М                     | М                     | М                     | М                     | М                     | М                     | М                     | М                     | 0   |    |     |
| Skin                                 |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| SOA, Hyperkeratosis                  |                   |                            |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |     | 1  | 1.0 |
| Musculoskeletal System               |                   |                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |    |     |
| Bone                                 |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Nervous System                       |                   |                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |    |     |
| Brain                                |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Respiratory System                   |                   |                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |    |     |
| Lung                                 |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Bronchiole, Infiltration Cellu Focal | ular, Lymphocyte, |                            |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |     | 1  | 1.0 |
| Nose                                 |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |
| Respirat Epith, Hyperplasia          | a, Goblet Cell    |                            |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       |     | 2  | 1.0 |
| Trachea                              |                   | +                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |    |     |

DAY ON TEST 0 0 0 0 0 0 0 0 0 0

M ..Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

ysis precludes evaluation

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

Test Type: 90-DAY

Kidney

Nephropathy

Urinary Bladder

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

10

10

5 1.0

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

**CAS Number:** 1896-62-4

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:21

First Dose M/F: NA / NA

|                       | DATONIESI | U | U | U | U | U | U | U | U | U | U |         |
|-----------------------|-----------|---|---|---|---|---|---|---|---|---|---|---------|
| F 344/N Rat Male      |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| r 344/IN Rat IVIale   |           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
| VEHICLE CONTROL       |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
|                       | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                       | AMIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                       |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                       |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | ****    |
|                       |           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |
| Special Senses System |           |   |   |   |   |   |   |   |   |   |   |         |
| Eye                   |           | + | + | + | + | + | + | + | + | + | + | 10      |
| Harderian Gland       |           | + | + | + | + | + | + | + | + | + | + | 10      |
| Urinary System        |           |   |   |   |   |   |   |   |   |   |   |         |
|                       |           |   |   |   |   |   |   |   |   |   |   |         |

DAY ON TEST A A A A A A A A A A

M .. Missing tissue

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

F 344/N Rat Male

22.0 MG/KG

Test Type: 90-DAY

DAY ON TEST 3 0 0 1 2 ANIMAL ID Ō 0 1 5 0 1 8 7 

\*TOTALS

**Alimentary System** 

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

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

| Skin                           | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| SOA Epidermis, Hyperplasia     |   | 1 |   |   |   | 1 |   |   |   | 1 |    | 3 | 1.0 |
| SOA, Hyperkeratosis            |   | 2 | 1 |   | 1 | 1 |   | 1 |   | 1 |    | 6 | 1.2 |
| SOA, Sebaceous GI, Hypertrophy |   |   |   |   | 1 |   |   |   |   |   |    | 1 | 1.0 |

Musculoskeletal System

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:21

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION

Test Type: 90-DAY

CAS Number: 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:21

First Dose M/F: NA / NA

Lab: MBA

Species/Strain: Rat/F 344/N

F 344/N Rat Male 22.0 MG/KG

| DAY ON TEST | 0 | 0 | Λ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|-------------|---|---|---|---|---|---|---|---|---|---|-------|
| DAT ON ILST | 0 | 0 | n | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |       |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |       |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
| AMINAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |       |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTA |

NONE

# **Nervous System**

NONE

## **Respiratory System**

| Respiratory System                       |   |   |   |   |   |   |   |   |   |   |    |   |     |
|--|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Nose                                     | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| Respirat Epith, Hyperplasia, Goblet Cell |   |   |   | 1 | 2 | 2 | 1 |   | 1 | 1 |    | 6 | 1.3 |
| Special Senses System                    |   |   |   |   |   |   |   |   |   |   |    |   |     |
| NONE                                     |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Urinary System                           |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| Nephropathy                              | 1 |   | 1 | 1 |   | 1 | 1 |   |   | 1 |    | 6 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion presentI ..Insufficient tissue

## Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

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Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

F 344/N Rat Male

44.0 MG/KG

Test Type: 90-DAY

DAY ON TEST 0 0 0 0 0 0 0 0 0 0 0 9 3 9 9 9 9 9 9 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0 0 0 2 2 ANIMAL ID 0 0 0 0 2 5 0 0 0 0 2 8 0 2 1 0 0 0 0 2 2 2 2

\*TOTALS

**Alimentary System** 

 Liver
 +
 1

 Hepatodiaphragmatic Nodule
 2
 1
 2.0

 Stomach, Glandular
 +
 +
 +
 +
 +
 +
 10

**Cardiovascular System** 

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

| Skin                           | + | + | + | + | + | + | + | 1 | + | + | 9 |   |     |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| SOA Epidermis, Hyperplasia     | 1 | 1 | 1 |   | 1 |   | 1 |   | 1 |   |   | 6 | 1.0 |
| SOA, Hyperkeratosis            | 1 | 1 | 1 | 1 | 2 |   | 2 |   | 2 |   |   | 7 | 1.4 |
| SOA. Sebaceous Gl. Hypertrophy | 1 |   | 1 |   |   |   | 1 |   |   |   |   | 3 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION

Test Type: 90-DAY

CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

per: 1896-62-4

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

First Dose M/F: NA / NA

|                     | _            |   |   |   |   |   |   |   |   |   |   | 4       |
|---------------------|--------------|---|---|---|---|---|---|---|---|---|---|---------|
|                     | DAY ON TEST  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| F 344/N Rat Male    |              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| r 344/IN Kat Iviale |              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
| 44.0 MG/KG          |              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
|                     | A NIIMAA LID | 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 |         |
|                     |              | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | *****   |
|                     |              | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *IOTALS |

**Musculoskeletal System** 

NONE

**Nervous System** 

NONE

**Respiratory System** 

**Special Senses System** 

NONE

**Urinary System** 

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

 Nephropathy
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M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** 

Test Type: 90-DAY

**CAS Number:** 1896-62-4

Species/Strain: Rat/F 344/N

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

First Dose M/F: NA / NA

| F 344 | /N Rat Male |  |
|-------|-------------|--|
| 87.5  | MG/KG       |  |

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

\*TOTALS

**Alimentary System** 

Stomach, Glandular 10

**Cardiovascular System** 

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

| Skin                           | + | + | + | + | + | + | + | + | + | + | 10 |     |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| SOA Epidermis, Hyperplasia     | 2 | 1 | 2 | 2 | 2 |   | 1 | 1 |   | 1 | 8  | 1.5 |
| SOA, Hyperkeratosis            | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 10 | 1.7 |
| SOA, Sebaceous GI, Hypertrophy | 1 | 1 | 1 |   | 2 |   | 1 | 1 |   |   | 6  | 1.2 |

Musculoskeletal System

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X .. Lesion present

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

CAS Number: 1896-62-4

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

F 344/N Rat Male 87.5 MG/KG

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

\*TOTALS

8 1.0

NONE

# **Nervous System**

NONE

# **Respiratory System**

Nephropathy

Nose 10 Respirat Epith, Hyperplasia, Goblet Cell 6 1.2 **Special Senses System** NONE **Urinary System** Kidney 10

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4 **Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

| F 344 | /N Rat Male |
|-------|-------------|
| 175   | MG/KG       |

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

\*TOTALS

**Alimentary System** 

Stomach, Glandular 10

**Cardiovascular System** 

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

| Skin                              | + | + | + | + | + | + | + | + | + | + | 10 |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| SOA Epidermis, Hyperplasia        | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 10 | 2.2 |
| SOA, Hyperkeratosis               | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 10 | 1.9 |
| SOA, Inflammation, Chronic Active | 2 |   |   |   |   |   |   | 2 |   | 1 | 3  | 1.7 |
| SOA, Necrosis                     | 2 |   |   |   |   |   |   | 2 |   | 2 | 3  | 2.0 |
| SOA, Sebaceous GI, Hypertrophy    | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 10 | 1.8 |

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION Species/Strain: Rat/F 344/N

Test Type: 90-DAY

OAC November 1999 20 1

CAS Number: 1896-62-4

Time Report Requested: 07:35:22

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

|                  | DAY ON TEST | 0      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|------------------|-------------|--------|---|---|---|---|---|---|---|---|---|---------|
| F 344/N Rat Male |             | 0      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| 175 MG/KG        |             | 9<br>3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
|                  | ANIMAL ID   | 0      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                  | AMINALID    | Ū      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                  |             | 0      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                  |             | 4      | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | ******* |
|                  |             | _1_    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

**Musculoskeletal System** 

NONE

**Nervous System** 

NONE

**Respiratory System** 

**Special Senses System** 

NONE

**Urinary System** 

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

| F 344/N Rat Male<br>350 MG/KG | DAY ON TEST  ANIMAL ID | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>1 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>2 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>3 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>4 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>5 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>6 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>7 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>8 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>9 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>0 | *TO | та | LS_ |
|-------------------------------|------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----|----|-----|
| 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  |    |     |
| Vacuolization Cytoplasmic     |                        | 1                                    |                                      |                                      |                                      | 1                                    |                                      |                                      | 1                                    |                                      |                                      |     | 3  | 1.0 |
| Pancreas                      |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Atrophy                       |                        |                                      |                                      |                                      |                                      | 1                                    |                                      |                                      |                                      | 1                                    |                                      |     | 2  | 1.0 |
| Salivary Glands               |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Stomach, Forestomach          |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Stomach, Glandular            |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Tongue                        |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Cardiovascular System         |                        |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |     |    |     |
| Blood Vessel                  |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| Heart                         |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |
| <b>Endocrine System</b>       |                        |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |     |    |     |
| Adrenal Cortex                |                        | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | +                                    | 10  |    |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present I .. Insufficient tissue

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

Test Type: 90-DAY

CAS Number: 1896-62-4

First Dose M/F: NA / NA Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

| CAS Number: 1896-62-4 |  |
|-----------------------|--|
|                       |  |

| F 344/N Rat Male<br>350 MG/KG | DAY ON TEST  ANIMAL ID | 0<br>9<br>3<br>0<br>0<br>5<br>1 | 0<br>9<br>3<br>0<br>0<br>5<br>2 | 0<br>9<br>3<br>0<br>0<br>5<br>3 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>4 | 0<br>9<br>3<br>0<br>0<br>5<br>5 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>6 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>7 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>8 | 0<br>9<br>3<br>0<br>0<br>0<br>5<br>9 | 0 9 3 0 0 0 6 0 | *TC | TΑ | LS  |
|-------------------------------|------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------|-----|----|-----|
| Adrenal Medulla               |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Islets, Pancreatic            |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Parathyroid Gland             |                        | М                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 9   |    |     |
| Pituitary Gland               |                        | +                               | +                               | I                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 9   |    |     |
| Thyroid Gland                 |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Ectopic Thymus, Focal         |                        |                                 |                                 |                                 |                                      |                                 |                                      |                                      |                                      |                                      | 1               |     | 1  | 1.0 |
| General Body System           |                        |                                 |                                 |                                 |                                      |                                 |                                      |                                      |                                      |                                      |                 |     |    |     |
| NONE<br>Genital System        |                        |                                 |                                 |                                 |                                      |                                 |                                      |                                      |                                      |                                      |                 |     |    |     |
| Geriitai System               |                        |                                 |                                 |                                 |                                      |                                 |                                      |                                      |                                      |                                      |                 |     |    |     |
| Epididymis                    |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Preputial Gland               |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Prostate                      |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Seminal Vesicle               |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Testes                        |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Hematopoietic System          |                        |                                 |                                 |                                 |                                      |                                 |                                      |                                      |                                      |                                      |                 |     |    |     |
| Bone Marrow                   |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Lymph Node, Mandibular        |                        | М                               | М                               | М                               | М                                    | М                               | М                                    | М                                    | М                                    | М                                    | М               | 0   |    |     |
| Lymph Node, Mesenteric        |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Spleen                        |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Thymus                        |                        | +                               | +                               | +                               | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | +               | 10  |    |     |
| Atrophy                       |                        |                                 | 1                               |                                 | 1                                    |                                 |                                      |                                      |                                      |                                      |                 |     | 2  | 1.0 |

DAY ON TECT A A A A A A A A A

M ..Missing tissue

I ..Insufficient tissue

A ..Autolysis precludes evaluation BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

Lab: MBA

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

| F 344 | N Rat Male |
|-------|------------|
| 350   | MG/KG      |

| DAY ON TEST                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |      |             |
|--|---|---|---|---|---|---|---|---|---|---|------|-------------|
| F 344/N Rat Male                         | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |      |             |
| 350 MG/KG                                | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |      |             |
| ANIMAL ID                                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |      |             |
| 7.111177.12.13                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |      |             |
|  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | *TOT | <b>^1</b> C |
| Integramentary Cyctem                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOT | ALS_        |
| Integumentary System                     |   |   |   |   |   |   |   |   |   |   |      |             |
| Mammary Gland                            | М | М | М | М | М | М | М | М | М | М | 0    |             |
| Skin                                     | + | + | + | + | + | + | + | + | + | + | 10   |             |
| SOA Epidermis, Hyperplasia               | 2 | 4 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 10   | 2.3         |
| SOA, Hyperkeratosis                      | 1 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 |   | 9    | 2.1         |
| SOA, Inflammation, Chronic Active        |   | 3 | 3 |   |   |   |   |   | 3 | 1 | 4    | 2.5         |
| SOA, Necrosis                            |   |   | 3 |   |   |   |   |   | 3 | 1 | 3    | 2.3         |
| SOA, Sebaceous GI, Hypertrophy           |   | 1 | 1 | 2 | 1 | 3 | 3 | 2 |   |   | 7    | 1.9         |
| Musculoskeletal System                   |   |   |   |   |   |   |   |   |   |   |      |             |
| Bone                                     | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Nervous System                           |   |   |   |   |   |   |   |   |   |   |      |             |
| Brain                                    | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Respiratory System                       |   |   |   |   |   |   |   |   |   |   |      |             |
| Lung                                     | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Nose                                     | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Respirat Epith, Hyperplasia, Goblet Cell | 1 |   | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 9    | 1.7         |
| Trachea                                  | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Special Senses System                    |   |   |   |   |   |   |   |   |   |   |      |             |
| Eye                                      | + | + | + | + | + | + | + | + | + | + | 10   |             |
| Harderian Gland                          | + | + | + | + | + | + | + | + | + | + | 10   |             |

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**Urinary System** 

Urinary Bladder

**CAS Number:** 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

| F 344 | I/N Rat Male | Ur |
|-------|--------------|----|
| 350   | MG/KG        |    |
|       |              |    |

|   | Y ON TEST | 0         | 0      | 0      | 0      | 0      | 0      | 0                     | 0                     | 0         | 0         |     |     |     |  |
|---|-----------|-----------|--------|--------|--------|--------|--------|-----------------------|-----------------------|-----------|-----------|-----|-----|-----|--|
| 344/N Rat Male<br>50 MG/KG                      |           | 9<br>3    | 9<br>3 | 9<br>3 | 9<br>3 | 9<br>3 | 9<br>3 | 9<br>3                | 9<br>3                | 9<br>3    | 9<br>3    |     |     |     |  |
|   | ANIMAL ID | 0 0 0 5 1 | 00052  | 00053  | 00054  | 00055  | 00056  | 0<br>0<br>0<br>5<br>7 | 0<br>0<br>0<br>5<br>8 | 0 0 0 5 9 | 0 0 0 6 0 | *TC | )TA | LS  |  |
| Infiltration Cellular, Lymphocyte rinary System | ·         |           |        |        |        |        |        |                       |                       |           | 3         |     | 1   | 3.0 |  |
| Kidney  |           | +         | +      | +      | +      | +      | +      | +                     | +                     | +         | +         | 10  |     |     |  |
| Nephropathy                                     |           | 1         | 2      | 1      |        | 1      | 1      | 2                     | 2                     | 1         | 2         |     | 9   | 1.4 |  |
| Renal Tubule, Casts Granular                    |           |           |        |        | 1      |        | 1      |                       | 1                     |           |           |     | 3   | 1.0 |  |

DAY ON TEXT OF A COLOR OF A COLOR

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

**Experiment Number: 95003-03** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male **CONTROL SPECIAL** 

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X .. Lesion present I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

First Dose M/F: NA / NA

DAY ON TEST

F 344/N Rat Male **CONTROL SPECIAL** 

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male TK 22.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Compound:** Methyl trans-styryl ketone

CAS Number: 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 22.0 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Time Report Requested: 07:35:22

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 44.0 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 44.0 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

**Experiment Number: 95003-03** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male TK 87.5 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X .. Lesion present I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

4) Marked 2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Compound:** Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 87.5 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male TK 175 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Time Report Requested: 07:35:22

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 175 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLA

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male TK 350 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:22

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Male TK 350 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

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

M ..Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone **CAS Number:** 1896-62-4

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

| F 344/N Rat Female VEHICLE CONTROL  Alimentary System | OAY ON TEST | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>1 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>2 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>3 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>4 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>5 | 0<br>9<br>3<br>0<br>0<br>6<br>6 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>7 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>8 | 0<br>9<br>3<br>0<br>0<br>0<br>6<br>9 | 0<br>9<br>3<br>0<br>0<br>0<br>7<br>0 | *TO      | TΑ | LS  |
|---|-------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|----------|----|-----|
|   |             |                                      |                                      |                                      |                                      |                                      |                                 |                                      |                                      |                                      |                                      |          |    |     |
| Esophagus   |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Intestine Large, Cecum                                |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Intestine Large, Colon                                |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Intestine Large, Rectum Intestine Small, Duodenum     |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10<br>10 |    |     |
| Intestine Small, Ileum                                |             | +                                    | +                                    | +                                    | +                                    |                                      | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Intestine Small, Jejunum                              |             | +                                    |                                      |                                      |                                      | +                                    | +                               |                                      | +                                    | +                                    |                                      | 10       |    |     |
| Liver   |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Hepatodiaphragmatic Nodule                            |             | 2                                    | т                                    | т                                    | т                                    | т                                    | т                               | т                                    | т                                    | т                                    | т                                    | 10       | 1  | 2.0 |
| Pancreas  |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       | ı  | 2.0 |
| Salivary Glands                                       |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Stomach, Forestomach                                  |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Stomach, Glandular                                    |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Tongue  |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Cardiovascular System                                 |             | •                                    | ·                                    | •                                    | •                                    | •                                    | ·                               | ·                                    | •                                    | •                                    | ·                                    | 10       |    |     |
| Blood Vessel  |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Heart   |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Endocrine System                                      |             |                                      |                                      |                                      |                                      |                                      |                                 |                                      |                                      |                                      |                                      |          |    |     |
| Adrenal Cortex  |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |
| Adrenal Medulla                                       |             | +                                    | +                                    | +                                    | +                                    | +                                    | +                               | +                                    | +                                    | +                                    | +                                    | 10       |    |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

| F 344/N Rat Female |
|--------------------|
| VEHICLE CONTROL    |

| DA   | AY ON TEST | 0                     | 0         | 0                     | 0                     | 0         | 0                     | 0                     | 0                     | 0                     | 0                     |     |          |     |
|--|------------|-----------------------|-----------|-----------------------|-----------------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----|----------|-----|
| F 344/N Rat Female                           |            | <i>0</i><br><i>9</i>  | 9         | <i>0</i><br><i>9</i>  | 9                     | 9         | 9                     | 9                     | 9                     | 9                     | 9                     |     |          |     |
| VEHICLE CONTROL                              |            | 3                     | 3         | 3                     | 3                     | 3         | 3                     | 3                     | 3                     | 3                     | 3                     |     |          |     |
|  | ANIMAL ID  | 0<br>0<br>0<br>6<br>1 | 0 0 0 6 2 | 0<br>0<br>0<br>6<br>3 | 0<br>0<br>0<br>6<br>4 | 0 0 0 6 5 | 0<br>0<br>0<br>6<br>6 | 0<br>0<br>0<br>6<br>7 | 0<br>0<br>0<br>6<br>8 | 0<br>0<br>0<br>6<br>9 | 0<br>0<br>0<br>7<br>0 | *TC | <u> </u> | LS_ |
| Islets, Pancreatic                           |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Parathyroid Gland                            |            | М                     | +         | +                     | М                     | М         | М                     | +                     | М                     | М                     | M                     | 3   |          |     |
| Pituitary Gland                              |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Thyroid Gland                                |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Ectopic Thymus                               |            |                       |           | 1                     |                       |           |                       |                       |                       |                       |                       |     | 1        | 1.0 |
| General Body System                          |            |                       |           |                       |                       |           |                       |                       |                       |                       |                       |     |          |     |
| Tissue NOS<br>Abdominal, Fat, Necrosis, Foca | ı          |                       |           |                       |                       |           |                       | +<br>4                |                       |                       |                       | 1   | 1        | 4.0 |
| Genital System                               | !          |                       |           |                       |                       |           |                       | 7                     |                       |                       |                       |     | •        | 4.0 |
| Clitoral Gland                               |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Ovary  |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Uterus                                       |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Dilatation                                   |            | Χ                     |           |                       |                       |           |                       |                       |                       |                       |                       |     | 1        |     |
| Hematopoietic System                         |            |                       |           |                       |                       |           |                       |                       |                       |                       |                       |     |          |     |
| Bone Marrow                                  |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Lymph Node, Mandibular                       |            | М                     | M         | М                     | M                     | М         | M                     | M                     | M                     | M                     | M                     | 0   |          |     |
| Lymph Node, Mesenteric                       |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Spleen                                       |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Thymus                                       |            | +                     | +         | +                     | +                     | +         | +                     | +                     | +                     | +                     | +                     | 10  |          |     |
| Atrophy                                      |            | 1                     | 1         | 1                     | 1                     |           | 1                     | 1                     | 1                     | 1                     | 1                     |     | 9        | 1.0 |

DAY ON TEST A A A A A A A A A

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

**Integumentary System** 

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION Species/Strain: Rat/F 344/N

Test Type: 90-DAY

CAS Number: 1896-62-4

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

Lab: MBA

| F 344/N Rat Female<br>VEHICLE CONTROL | DAY ON TEST | 0<br>0<br>9<br>3      |     |     |     |
|---------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----|-----|-----|
|                                       | ANIMAL ID   | 0<br>0<br>0<br>6<br>1 | 0<br>0<br>0<br>6<br>2 | 0<br>0<br>0<br>6<br>3 | 0<br>0<br>0<br>6<br>4 | 0<br>0<br>0<br>6<br>5 | 0<br>0<br>0<br>6<br>6 | 0<br>0<br>0<br>6<br>7 | 0<br>0<br>0<br>6<br>8 | 0<br>0<br>0<br>6<br>9 | 0<br>0<br>0<br>7<br>0 | *TC | ΣTΑ | LS_ |
| 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                 |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |     |     |
| Eye                                   |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |     |     |
| Harderian Gland                       |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |     |     |
| Infiltration Cellular, Lipocyto       | е           |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |     | 1   | 1.0 |
| Urinary System                        |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |     |     |
| Kidney                                |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |     |     |
| Mineralization                        |             |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       | 4.0 | 1   | 1.0 |
| Urinary Bladder                       |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10  |     |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

A ..Autorysis preciudes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:22

First Dose M/F: NA / NA

DAY ON TEST  $\begin{bmatrix} \theta & \theta \\ \theta & \theta \\ 9 & 9 \end{bmatrix}$  $\left[ egin{array}{c|c} 0 & 0 \\ 0 & 0 \\ 9 & 9 \end{array} \right]$ 0 0 9 0 F 344/N Rat Female 9

0 0 9 0

| 22.0 MG/KG  |           | 3                     | 3                     | 3                     | 3                     | 3                     | 3                     | 3                     | 3                     | 3                     | 3                     |         |    |     |
|---|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------|----|-----|
|   | ANIMAL ID | 0<br>0<br>0<br>7<br>1 | 0<br>0<br>0<br>7<br>2 | 0<br>0<br>0<br>7<br>3 | 0<br>0<br>0<br>7<br>4 | 0<br>0<br>0<br>7<br>5 | 0<br>0<br>0<br>7<br>6 | 0<br>0<br>0<br>7<br>7 | 0<br>0<br>0<br>7<br>8 | 0<br>0<br>0<br>7<br>9 | 0<br>0<br>0<br>8<br>0 | *TC     | ТА | LS  |
| Alimentary System   |           |                       |                       |                       |                       |                       |                       |                       |                       | •                     |                       |         |    |     |
| Liver<br>Hepatodiaphragmatic Nodule<br>Stomach, Glandular             |           | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +<br>2<br>+           | 1<br>10 | 1  | 2.0 |
| Cardiovascular System   |           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |         |    |     |
| NONE<br>Endocrine System  |           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |         |    |     |
| Adrenal Cortex  General Body System                                   |           |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       | 1       |    |     |
| Tissue NOS Abdominal, Fat, Necrosis, Focal Genital System             | I         |                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       | 1       | 1  | 3.0 |
| Uterus<br>Dilatation<br>Hematopoietic System                          |           | +                     | +                     | +                     | +<br>X                | +                     | +                     | +<br>X                | +                     | +                     | +<br>X                | 10      | 3  |     |
| Lymph Node<br>Mediastinal, Hyperplasia, Lympl<br>Integumentary System | hoid      |                       |                       |                       |                       |                       | +<br>2                |                       |                       |                       |                       | 1       | 1  | 2.0 |
| Skin  |           | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 10      |    |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

<sup>1-4 ..</sup>Lesion qualified as:

**Experiment Number: 95003-03** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4 **Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/N Rat Female<br>22.0 MG/KG | DAY ON TEST | 0<br>0<br>9<br>3      | 0 0 9 3               | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3      | 0 0 9 3   | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3      |       |     |
|----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|-----|
|                                  | ANIMAL ID   | 0<br>0<br>0<br>7<br>1 | 0<br>0<br>0<br>7<br>2 | 0<br>0<br>0<br>7<br>3 | 0<br>0<br>0<br>7<br>4 | 0 0 0 7 5 | 0<br>0<br>0<br>7<br>6 | 0<br>0<br>0<br>7<br>7 | 0<br>0<br>0<br>7<br>8 | 0<br>0<br>0<br>7<br>9 | 0<br>0<br>0<br>8<br>0 | *TOTA | LS  |
| SOA Epidermis, Hyperplasia       |             |                       | 1                     |                       |                       |           |                       | 1                     |                       | 1                     |                       | 3     | 1.0 |
| SOA, Hyperkeratosis              |             |                       | 1                     | 1                     | 1                     | 1         |                       | 1                     |                       | 1                     |                       | 6     | 1.0 |
| SOA, Sebaceous GI, Hypertro      | phy         |                       |                       |                       |                       |           |                       | 1                     |                       |                       |                       | 1     | 1.0 |
| Musculoskalatal System           |             |                       |                       |                       |                       |           |                       |                       |                       |                       |                       |       |     |

## Musculoskeletal System

NONE

# **Nervous System**

NONE

# **Respiratory System**

Nose 10 Respirat Epith, Hyperplasia, Goblet Cell 8 1.0

# **Special Senses System**

NONE

# **Urinary System**

| Kidney      | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|-------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Nephropathy |   | 1 |   |   |   |   |   | 1 |   |   |    | 2 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue BLANK .. Not examined microscopically 1-4 ..Lesion qualified as: 1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

D

Test Type: 90-DAY

**Experiment Number: 95003-03** 

| F 344 | /N Ra | t Female |
|-------|-------|----------|
| 44.0  | MG/   | KG       |

| AY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------|---|---|---|---|---|---|---|---|---|---|
|            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|            | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|            | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AMINIAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|            | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

| Liver                      |   |   |   |   | + | + |   |   |   |   | 2  |   |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Hepatodiaphragmatic Nodule |   |   |   |   | 2 | 2 |   |   |   |   |    | 2 | 2.0 |
| Stomach, Glandular         | + | + | + | + | + | + | + | + | + | + | 10 |   |     |

# **Cardiovascular System**

**Alimentary System** 

NONE

# **Endocrine System**

NONE

## **General Body System**

NONE

## **Genital System**

| Uterus                             | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Dilatation                         | X |   | Χ |   |   |   | Χ | Χ | Χ | Χ |    | 6 |     |
| Hematopoietic System               |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Lymph Node                         |   |   | + |   |   |   | + |   |   |   | 2  |   |     |
| Mediastinal, Hyperplasia, Lymphoid |   |   | 2 |   |   |   | 2 |   |   |   |    | 2 | 2.0 |
| Integumentary System               |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Skin                               | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| SOA Epidermis, Hyperplasia         |   | 1 | 1 |   |   |   | 1 |   |   |   |    | 3 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

Experiment Number: 95003-03 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/N Rat Female<br>44.0 MG/KG | DAY ON TEST | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3 | 0<br>0<br>9<br>3      | 0<br>0<br>9<br>3 |       |     |
|----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|-----------------------|------------------|-------|-----|
|                                  | ANIMAL ID   | 0<br>0<br>0<br>8<br>1 | 0<br>0<br>0<br>8<br>2 | 0<br>0<br>0<br>8<br>3 | 0<br>0<br>0<br>8<br>4 | 0<br>0<br>0<br>8<br>5 | 0<br>0<br>0<br>8<br>6 | 0<br>0<br>0<br>8<br>7 | 00088            | 0<br>0<br>0<br>8<br>9 | 00090            | *TOTA | LS_ |
| SOA, Hyperkeratosis              |             |                       | 1                     | 1                     | 1                     | 1                     |                       | 1                     |                  | 1                     |                  | 6     | 1.0 |
| SOA, Sebaceous GI, Hypertrophy   |             |                       | 1                     |                       | 1                     | 1                     |                       | 1                     |                  | 1                     |                  | 5     | 1.0 |

Musculoskeletal System

NONE

**Nervous System** 

NONE

**Respiratory System** 

**Special Senses System** 

NONE

**Urinary System** 

| Kidney      | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|-------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Nephropathy |   |   | 1 |   |   |   |   |   |   | 1 |    | 2 | 1.0 |

M .. Missing tissue

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344 | N Rat Female |
|-------|--------------|
| 87.5  | MG/KG        |

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

\*TOTALS

10

1.0

| Hepatodiaphragmatic Nodule |  |
|----------------------------|--|
| Stomach, Glandular         |  |

**Alimentary System** 

Cardiovascular System

NONE

Liver

**Endocrine System** 

NONE

#### **General Body System**

NONE

#### **Genital System**

| Ovary                              |   |   |   |   |   |   |   |   | + |   | 1  |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Uterus                             | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| Dilatation                         |   |   | Χ |   |   |   | Χ |   |   |   |    | 2 |     |
| Hematopoietic System               |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Lymph Node                         |   |   |   |   | + |   |   |   |   |   | 1  |   |     |
| Mediastinal, Hyperplasia, Lymphoid |   |   |   |   | 2 |   |   |   |   |   |    | 1 | 2.0 |
| Integumentary System               |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Skin                               | + | + | + | + | + | + | + | + | + | + | 10 |   |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/N Rat Female<br>87.5 MG/KG                             | DAY ON TEST    | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>1 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>2 | 0<br>0<br>9<br>3<br>0<br>0<br>0<br>9<br>3 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>4 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>5 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>6 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>7 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>8 | 0<br>9<br>3<br>0<br>0<br>0<br>9<br>9 | 0<br>9<br>3<br>0<br>0<br>1<br>0 | *TC | <u>ATC</u> | LS_ |
|--|----------------|--------------------------------------|--------------------------------------|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|-----|------------|-----|
| SOA Epidermis, Hyperplas                                     | ia             | 3                                    | 1                                    |   | 1                                    | 1                                    | 2                                    |                                      | 1                                    |                                      | 2                               |     | 7          | 1.6 |
| SOA, Hyperkeratosis  |                | 2                                    | 2                                    |   | 2                                    | 3                                    | 2                                    | 1                                    | 2                                    | 1                                    | 2                               |     | 9          | 1.9 |
| SOA, Inflammation, Chronic Active                            |                |                                      |                                      |   |                                      |                                      |                                      |                                      |                                      |                                      |                                 |     | 1          | 1.0 |
| SOA, Sebaceous GI, Hypertrophy                               |                |                                      | 1                                    |   | 1                                    | 1                                    | 1                                    | 1                                    | 1                                    |                                      | 1                               |     | 7          | 1.0 |
| Musculoskeletal System                                       |                |                                      |                                      |   |                                      |                                      |                                      |                                      |                                      |                                      |                                 |     |            |     |
| NONE<br>Nervous System                                       |                |                                      |                                      |   |                                      |                                      |                                      |                                      |                                      |                                      |                                 |     |            |     |
| NONE<br>Respiratory System                                   |                |                                      |                                      |   |                                      |                                      |                                      |                                      |                                      |                                      |                                 |     |            |     |
| Nose<br>Respirat Epith, Hyperplasia<br>Special Senses System | ı, Goblet Cell | +                                    | +                                    | +   | +                                    | +                                    | +                                    | +                                    | +<br>1                               | +<br>1                               | +<br>1                          | 10  | 3          | 1.0 |
| NONE<br>Urinary System                                       |                |                                      |                                      |   |                                      |                                      |                                      |                                      |                                      |                                      |                                 |     |            |     |

Renal Tubule, Necrosis

M .. Missing tissue

Kidney

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

10

1 3.0

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/ | N Rat | Female |
|--------|-------|--------|
| 175    | MG/K  | G      |

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

\*TOTALS

| Liver                      |   |   |   |   | + |   |   |   |   |   | 1  |   |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Hepatodiaphragmatic Nodule |   |   |   |   | 2 |   |   |   |   |   |    | 1 | 2.0 |
| Stomach, Glandular         | + | + | + | + | + | + | + | + | + | + | 10 |   |     |

## **Cardiovascular System**

**Alimentary System** 

NONE

## **Endocrine System**

NONE

## **General Body System**

NONE

Thymus

## **Genital System**

| Clitoral Gland                     |   |   |   |   |   |   | + |   |   |   | 1  |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Cyst                               |   |   |   |   |   |   | 1 |   |   |   |    | 1 | 1.0 |
| Uterus                             | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
| Dilatation                         |   |   |   |   |   |   | Χ | Χ | Χ |   |    | 3 |     |
| Hematopoietic System               |   |   |   |   |   |   |   |   |   |   |    |   |     |
| Lymph Node                         |   |   |   |   | + |   |   |   |   | + | 2  |   |     |
| Mediastinal, Hyperplasia, Lymphoid |   |   |   |   | 2 |   |   |   |   | 3 |    | 2 | 2.5 |

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/ | N F | <b>Rat</b> | Female |
|--------|-----|------------|--------|
| 175    | MC  | 3/K        | G      |

**Integumentary System** 

| DAY ON TEST   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------|---|---|---|---|---|---|---|---|---|---|
|               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|               | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| V VIIIVAVI ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|               | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

| Skin                              | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| SOA Epidermis, Degeneration       |   |   |   | 3 |   |   |   | 3 |   |   |    | 2 | 3.0 |
| SOA Epidermis, Hyperplasia        | 1 |   | 3 | 4 | 3 | 2 | 1 | 3 | 2 | 1 |    | 9 | 2.2 |
| SOA, Hyperkeratosis               | 2 |   | 2 | 2 | 2 | 1 | 1 |   | 2 | 1 |    | 8 | 1.6 |
| SOA, Inflammation, Chronic Active |   | 2 | 1 | 3 | 3 |   |   | 3 | 3 |   |    | 6 | 2.5 |
| SOA, Necrosis                     |   | 2 | 2 |   | 3 | 1 |   |   |   |   |    | 4 | 2.0 |
| SOA, Sebaceous Gl, Hypertrophy    | 1 |   | 2 |   |   | 2 |   |   | 1 |   |    | 4 | 1.5 |
| SOA. Ulcer                        |   |   |   |   |   |   |   | Χ |   |   |    | 1 |     |

## **Musculoskeletal System**

NONE

**Nervous System** 

NONE

**Respiratory System** 

| Nose                                     | + | + | + | + | + | + | + | + | + | + | 10 |   |     |
|--|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Respirat Epith, Hyperplasia, Goblet Cell | 2 | 1 | 1 | 2 | 1 |   |   | 2 | 1 |   |    | 7 | 1.4 |

**Special Senses System** 

NONE

**Urinary System** 

M ..Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** 

Test Type: 90-DAY

**CAS Number:** 1896-62-4

First Dose M/F: NA / NA Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

Species/Strain: Rat/F 344/N

| F 344/ | N Rat Female |
|--------|--------------|
| 175    | MG/KG        |

| DAY ON TEST    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|----------------|---|---|---|---|---|---|---|---|---|---|---------|
|                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|                | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| V VIII VIVI IL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| ANIMAL ID      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |         |
|                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | *****   |
|                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |
|                |   |   |   |   |   |   |   |   |   |   | 10      |

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

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

**CAS Number:** 1896-62-4

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

| F 344 | /N Rat Female |
|-------|---------------|
| 350   | MG/KG         |

|                           | DAY ON TEST | 0      | 0   | 0 | 0      | 0      | 0      | 0      | 0      | 0 | 0 |     |    |     |
|---------------------------|-------------|--------|-----|---|--------|--------|--------|--------|--------|---|---|-----|----|-----|
| F 344/N Rat Female        |             | 0<br>9 | 9   | 9 | 9      | 9      | 9      | 9      | 9      | 9 | 9 |     |    |     |
| 350 MG/KG                 |             | 3      | 3   | 3 | 3      | 3      | 3      | 3      | 3      | 3 | 3 |     |    |     |
|                           | ANIMAL ID   | 0      | 0   | 0 | 0      | 0      | 0      | 0      | 0      | 0 | 0 |     |    |     |
|                           |             | 1      | 1   | 1 | 1      | 1      | 1      | 1      | 1      | 1 | 1 |     |    |     |
|                           |             | 1<br>1 | 1 2 | 3 | 1<br>4 | 1<br>5 | 1<br>6 | 1<br>7 | 1<br>8 | 9 | 2 | *TO | TΑ | LS  |
| Alimentary System         |             |        |     |   |        |        |        |        |        | • |   |     |    |     |
| Esophagus                 |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Large, Cecum    |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Large, Colon    |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Large, Rectum   |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Small, Duodenun | n           | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Small, Ileum    |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Intestine Small, Jejunum  |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Liver                     |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Hepatodiaphragmatic No    | dule        |        |     |   |        |        |        | 2      |        |   |   |     | 1  | 2.0 |
| Pancreas                  |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Salivary Glands           |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Stomach, Forestomach      |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Stomach, Glandular        |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Tongue                    |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Cardiovascular System     |             |        |     |   |        |        |        |        |        |   |   |     |    |     |
| Blood Vessel              |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Heart                     |             | +      | +   | + | +      | +      | +      | +      | +      | + | + | 10  |    |     |
| Cardiomyopathy            |             |        |     |   |        |        | 1      |        |        |   |   |     | 1  | 1.0 |
| Endocrine System          |             |        |     |   |        |        |        |        |        |   |   |     |    |     |

M .. Missing tissue

A .. Autolysis precludes evaluation

**Adrenal Cortex** 

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

10

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION Species/Strain: Rat/F 344/N

Test Type: 90-DAY

CAS Number: 1896-62-4

First Dose M/F: NA / NA

Time Report Requested: 07:35:23

Date Report Requested: 10/22/2014

Lab: MBA

| F 344/N Rat Female<br>350 MG/KG | DAY ON TEST | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1<br>2 | 0<br>9<br>3<br>0<br>0<br>1<br>1<br>3 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1<br>5 | 0<br>9<br>3<br>0<br>0<br>1<br>1<br>6 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1<br>8 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>2 | *TO | )TA | LS  |
|---------------------------------|-------------|---------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|---------------------------------|-----|-----|-----|
| Adrenal Medulla                 |             | +                               | +                                    | +                                    | - 1                             | +                                    | +                                    | +                               | +                                    | +                               | +                               | 9   |     |     |
| Islets, Pancreatic              |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Parathyroid Gland               |             | М                               | +                                    | M                                    | M                               | +                                    | +                                    | M                               | +                                    | +                               | +                               | 6   |     |     |
| Pituitary Gland                 |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Thyroid Gland                   |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| General Body System             |             |                                 |                                      |                                      |                                 |                                      |                                      |                                 |                                      |                                 |                                 |     |     |     |
| NONE<br>Genital System          |             |                                 |                                      |                                      |                                 |                                      |                                      |                                 |                                      |                                 |                                 |     |     |     |
| Clitoral Gland                  |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Ovary                           |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Uterus                          |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Dilatation                      |             | Χ                               |                                      |                                      | Χ                               |                                      | Χ                                    | Χ                               | Χ                                    | Χ                               |                                 |     | 6   |     |
| Hematopoietic System            |             |                                 |                                      |                                      |                                 |                                      |                                      |                                 |                                      |                                 |                                 |     |     |     |
| Bone Marrow                     |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Lymph Node                      |             | +                               |                                      |                                      | +                               |                                      |                                      |                                 | +                                    |                                 |                                 | 3   |     |     |
| Mediastinal, Congestion         |             |                                 |                                      |                                      | 2                               |                                      |                                      |                                 |                                      |                                 |                                 |     | 1   | 2.0 |
| Mediastinal, Hyperplasia, I     | _ymphoid    | 2                               |                                      |                                      | 3                               |                                      |                                      |                                 | 2                                    |                                 |                                 |     | 3   | 2.3 |
| Lymph Node, Mandibular          |             | М                               | М                                    | М                                    | М                               | М                                    | М                                    | М                               | М                                    | М                               | М                               | 0   |     |     |
| Lymph Node, Mesenteric          |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |
| Spleen                          |             | +                               | +                                    | +                                    | +                               | +                                    | +                                    | +                               | +                                    | +                               | +                               | 10  |     |     |

M ..Missing tissue

A .. Autolysis precludes evaluation

Congestion

BLANK ..Not examined microscopically

1) Minimal 3) Moderate

2) Mild

4) Marked

1 2.0

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

<sup>1-4 ..</sup>Lesion qualified as:

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

Route: SKIN APPLICATION Species/Strain: Rat/F 344/N

Test Type: 90-DAY

| F 344/N Rat Female<br>350 MG/KG          | DAY ON TEST | 0<br>9<br>3<br>0<br>0<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1 | 0<br>9<br>3<br>0<br>0<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>1 | 0<br>9<br>3<br>0<br>0<br>1<br>2 |     |     |           |
|--|-------------|----------------------------|---------------------------------|----------------------------|---------------------------------|----------------------------|---------------------------------|----------------------------|----------------------------|---------------------------------|---------------------------------|-----|-----|-----------|
|  |             | 1                          | 2                               | 3                          | 4                               | 5                          | 6                               | 7                          | 8                          | 9                               | 0                               | *TC | )TA | <u>LS</u> |
| Thymus                                   |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Atrophy                                  |             | 1                          | 1                               | 1                          | 1                               | 1                          | 1                               | 1                          |                            | 1                               | 1                               |     | 9   | 1.0       |
| Integumentary System                     |             |                            |                                 |                            |                                 |                            |                                 |                            |                            |                                 |                                 |     |     |           |
| Mammary Gland                            |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Skin                                     |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| SOA Epidermis, Degeneration              |             |                            |                                 |                            |                                 | 1                          |                                 |                            |                            |                                 |                                 |     | 1   | 1.0       |
| SOA Epidermis, Hyperplasia               |             |                            | 3                               | 3                          | 2                               | 3                          | 2                               | 2                          | 3                          | 2                               | 1                               |     | 10  | 2.2       |
| SOA, Hyperkeratosis                      |             |                            | 2                               | 2                          | 2                               | 3                          | 2                               | 2                          | 2                          | 1                               |                                 |     | 9   | 2.0       |
| SOA, Inflammation, Chronic Active        |             |                            | 2                               | 3                          |                                 | 3                          |                                 |                            | 3                          |                                 |                                 |     | 4   | 2.8       |
| SOA, Necrosis                            |             |                            |                                 | 1                          |                                 | 2                          |                                 |                            |                            |                                 |                                 |     | 2   | 1.5       |
| SOA, Sebaceous GI, Hyp                   | ertrophy    | 1                          | 1                               | 2                          | 2                               | 2                          | 2                               | 2                          |                            | 1                               |                                 |     | 8   | 1.6       |
| SOA, Ulcer                               |             |                            |                                 |                            |                                 |                            |                                 |                            | Χ                          |                                 |                                 |     | 1   |           |
| Musculoskeletal System                   |             |                            |                                 |                            |                                 |                            |                                 |                            |                            |                                 |                                 |     |     |           |
| Bone                                     |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Nervous System                           |             |                            |                                 |                            |                                 |                            |                                 |                            |                            |                                 |                                 |     |     |           |
| Brain                                    |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Respiratory System                       |             |                            |                                 |                            |                                 |                            |                                 |                            |                            |                                 |                                 |     |     |           |
| Lung                                     |             | +                          | +                               | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Hemorrhage, Focal                        |             |                            |                                 |                            |                                 | 1                          |                                 |                            |                            |                                 |                                 |     | 1   | 1.0       |
| Nose                                     |             |                            |                                 | +                          | +                               | +                          | +                               | +                          | +                          | +                               | +                               | 10  |     |           |
| Respirat Epith, Hyperplasia, Goblet Cell |             |                            |                                 |                            |                                 |                            |                                 | 1                          | 1                          |                                 | 1                               |     | 5   | 1.2       |

M ..Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

X ..Lesion present

I .. Insufficient tissue

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

10

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Trachea

Eye

Kidney

CAS Number: 1896-62-4

Time Report Requested: 07:35:23 First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Lab: MBA

| F 344/ | N Rat Female |
|--------|--------------|
| 350    | MG/KG        |

**Special Senses System** 

Harderian Gland **Urinary System** 

Urinary Bladder

| DAY ON TEST | 0<br>0<br>9 | 0<br>0<br>9 | 0<br>0<br>9 | 0<br>0<br>9 | 0 0 9       | 0 0 9       | 0<br>0<br>9 | 0 0 9       | 0 0 9       | 0 0 9       |         |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
|             | 3           | 3           | 3           | 3           | 3           | 3           | 3           | 3           | 3           | 3           |         |
| ANIMAL ID   | 0<br>0<br>1 |         |
|             | 1           | 1<br>2      | 1<br>3      | 1<br>4      | 1<br>5      | 1<br>6      | 1<br>7      | 1<br>8      | 1<br>9      | 2<br>0      | *TOTALS |
|             | +           | +           | +           | +           | +           | +           | +           | +           | +           | +           | 10      |
|             |             |             |             |             |             |             |             |             |             |             |         |
|             | +           | +           | +           | +           | +           | +           | +           | +           | +           | +           | 10      |
|             | +           | +           | +           | +           | +           | +           | +           | +           | +           | +           | 10      |
|             |             |             |             |             |             |             |             |             |             |             |         |
|             | +           | +           | +           | +           | +           | +           | +           | +           | +           | +           | 10      |

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Type: 90-DAY Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

**Route: SKIN APPLICATION** Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female **CONTROL SPECIAL** 

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X .. Lesion present I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

4) Marked 2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Female CONTROL SPECIAL

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Respiratory System** 

Test Type: 90-DAY

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female TK 22.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

Time Report Requested: 07:35:23

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Female TK 22.0 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Respiratory System** 

Test Type: 90-DAY

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M ..Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female TK 44.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Time Report Requested: 07:35:23

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Female TK 44.0 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Respiratory System** 

Test Type: 90-DAY

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Route: SKIN APPLICATION Species/Strain: Rat/F 344/N

Test Type: 90-DAY

DAY ON TEST

F 344/N Rat Female TK 87.5 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Lab: MBA

DAY ON TEST

F 344/N Rat Female TK 87.5 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Respiratory System** 

Test Type: 90-DAY

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Type: 90-DAY

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Test Compound: Methyl trans-styryl ketone

CAS Number: 1896-62-4

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

#### F 344/N Rat Female TK 175 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X .. Lesion present I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

4) Marked 2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

Test Type: 90-DAY **Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

First Dose M/F: NA / NA

DAY ON TEST

F 344/N Rat Female MG/KG TK 175

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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

Test Type: 90-DAY

Test Compound: Methyl trans-styryl ketone

Route: SKIN APPLICATION CAS Number: 1896-62-4

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female TK 350 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

**Cardiovascular System** 

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014 Time Report Requested: 07:35:23

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

First Dose M/F: NA / NA Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 07:35:23

DAY ON TEST

F 344/N Rat Female TK 350 MG/KG

**Route: SKIN APPLICATION** 

Species/Strain: Rat/F 344/N

ANIMAL ID

\*TOTALS

**Respiratory System** 

Test Type: 90-DAY

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

\*\* END OF REPORT \*\*

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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