

Experiment Number: 93023-04
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**
Test Compound: 2,4-Hexadienal
CAS Number: 142-83-6

Date Report Requested: 10/21/2014
Time Report Requested: 18:35:59
First Dose M/F: NA / NA
Lab: SRI

| | |
|-----------------------------|------------|
| C Number: | C93023B |
| Lock Date: | 07/30/1997 |
| Cage Range: | All |
| Date Range: | All |
| Reasons For Removal: | All |
| Removal Date Range: | All |
| Treatment Groups: | All |
| Study Gender: | Both |
| PWG Approval Date | NONE |

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 AVERAGE SEVERITY GRADES[b]**
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 First Dose M/F: NA / NA
 Lab: SRI

| B6C3F1 Mouse MALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|----------------------------------|---------|----------|------|----------|------|----------|------|----------|---------|----------|---------|----------|
| Disposition Summary | | | | | | | | | | | | |
| Animals Initially In Study | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | |
| Early Deaths | | | | | | | | | | | | |
| Dosing Accident | 2 | | | | | | | | 1 | | | |
| Survivors | | | | | | | | | | | | |
| Terminal Sacrifice | 8 | | 10 | | 10 | | 10 | | 9 | | 10 | |
| Animals Examined Microscopically | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | |
| ALIMENTARY SYSTEM | | | | | | | | | | | | |
| Esophagus | (9) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Inflammation, Suppurative, Focal | | | | | | | | | 1 [2.0] | | | |
| Muscularis, Necrosis | 2 [2.5] | | | | | | | | 1 [2.0] | | | |
| Perforation | 1 [3.0] | | | | | | | | | | | |
| Gallbladder | (9) | | (0) | | (0) | | (0) | | (0) | | (9) | |
| Intestine Large, Cecum | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Intestine Large, Colon | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Intestine Large, Rectum | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Intestine Small, Duodenum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Small, Ileum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Small, Jejunum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Liver | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Pancreas | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Salivary Glands | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Stomach, Forestomach | (10) | | (10) | | (10) | | (10) | | (9) | | (10) | |
| Epithelium, Hyperplasia | 2 [2.0] | | | | | | | | | | 3 [1.3] | |
| Epithelium, Ulcer | 1 [2.0] | | | | | | | | | | | |
| Inflammation, Chronic | 1 [2.0] | | | | | | | | | | | |
| Stomach, Glandular | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Epithelium, Degeneration, Cystic | 1 [2.0] | | | | | | | | | | | |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 93023-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Mouse/B6C3F1

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Test Compound: 2,4-Hexadienal

CAS Number: 142-83-6

Date Report Requested: 10/21/2014

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First Dose M/F: NA / NA

Lab: SRI

| B6C3F1 Mouse MALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|------------------------------|---------|----------|-----|----------|-----|----------|-----|----------|---------|----------|---------|----------|
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | |
| Heart | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | |
| Adrenal Cortex | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Adrenal Medulla | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Parathyroid Gland | (9) | | (0) | | (0) | | (0) | | (0) | | (9) | |
| Cyst | | | | | | | | | | | 1 [1.0] | |
| Pituitary Gland | (9) | | (0) | | (0) | | (0) | | (0) | | (9) | |
| Thyroid Gland | (10) | | (0) | | (0) | | (0) | | (1) | | (9) | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | |
| None | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | |
| Coagulating Gland | (1) | | (0) | | (0) | | (0) | | (0) | | (0) | |
| Epididymis | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Preputial Gland | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Prostate | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Seminal Vesicle | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Testes | (10) | | (0) | | (0) | | (0) | | (2) | | (10) | |
| Germinal Epith, Degeneration | | | | | | | | | 1 [3.0] | | | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | |
| Bone Marrow | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Lymph Node, Mandibular | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Lymph Node, Mesenteric | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Necrosis, Lymphoid | 1 [3.0] | | | | | | | | | | | |
| Spleen | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Thymus | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Atrophy | 1 [3.0] | | | | | | | | 1 [4.0] | | | |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 93023-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Mouse/B6C3F1

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Test Compound: 2,4-Hexadienal

CAS Number: 142-83-6

Date Report Requested: 10/21/2014

Time Report Requested: 18:35:59

First Dose M/F: NA / NA

Lab: SRI

| B6C3F1 Mouse MALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY | |
|--|------|----------|------|----------|------|----------|------|----------|------|----------|-------|----------|-------|
| Necrosis, Lymphoid | 1 | [3.0] | | | | | | | | | | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | |
| Skin | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | | |
| Subcut Tiss, Foreign Body | 1 | [2.0] | | | | | | | | | | | |
| Subcut Tiss, Necrosis, Fatty | 1 | [3.0] | | | | | | | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | |
| Bone | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | | |
| Skeletal Muscle | (1) | | (0) | | (0) | | (0) | | (0) | | (0) | | |
| Necrosis, Focal | 1 | [2.0] | | | | | | | | | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | |
| Brain | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | |
| Lung | (10) | | (0) | | (0) | | (0) | | (1) | | (9) | | |
| Foreign Body | | | | | | | | | 1 | [2.0] | | | |
| Mediastinum, Foreign Body | 1 | [2.0] | | | | | | | | | | | |
| Mediastinum, Inflammation, Suppurative | 1 | [3.0] | | | | | | | | 1 | [3.0] | | |
| Necrosis | 1 | [2.0] | | | | | | | | | | | |
| Nose | (10) | | (10) | | (10) | | (10) | | (10) | | (10) | | |
| Exudate | | | | | | | | | | | | 1 | [1.0] |
| Olfactory Epi, Atrophy | | | | | | | | | | | | 4 | [2.5] |
| Olfactory Epi, Necrosis | | | | | | | | | | | | 5 | [1.2] |
| Vomeronas Org, Cyst | | | | | | | | | | | | 1 | [2.0] |
| Vomeronas Org, Degeneration, Cystic | | | | | | | | | | 1 | [2.0] | | |
| Pleura | (0) | | (0) | | (0) | | (0) | | (1) | | (0) | | |
| Inflammation, Suppurative | | | | | | | | | | 1 | [2.0] | | |
| Trachea | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Species/Strain: Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**
Test Compound: 2,4-Hexadienal
CAS Number: 142-83-6

Date Report Requested: 10/21/2014
Time Report Requested: 18:35:59
First Dose M/F: NA / NA
Lab: SRI

| B6C3F1 Mouse MALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|-------------------|------|----------|-----|----------|-----|----------|-----|----------|-----|----------|------|----------|
| None | | | | | | | | | | | | |
| URINARY SYSTEM | | | | | | | | | | | | |
| Kidney | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Urinary Bladder | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |

END OF MALE DATA

a - Number of animals examined microscopically at site and number of animals with lesion
b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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 CAS Number: 142-83-6

Date Report Requested: 10/21/2014
 Time Report Requested: 18:35:59
 First Dose M/F: NA / NA
 Lab: SRI

| B6C3F1 Mouse FEMALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|----------------------------------|---------|----------|------|----------|------|----------|------|----------|---------|----------|---------|----------|
| Disposition Summary | | | | | | | | | | | | |
| Animals Initially In Study | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | |
| Early Deaths | | | | | | | | | | | | |
| Survivors | | | | | | | | | | | | |
| Terminal Sacrifice | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | |
| Animals Examined Microscopically | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | |
| ALIMENTARY SYSTEM | | | | | | | | | | | | |
| Esophagus | (9) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Inflammation, Granulomatous | 1 [2.0] | | | | | | | | | | | |
| Gallbladder | (9) | | (0) | | (0) | | (0) | | (0) | | (9) | |
| Intestine Large, Cecum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Large, Colon | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Large, Rectum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Small, Duodenum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Small, Ileum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Intestine Small, Jejunum | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Liver | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Pancreas | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Salivary Glands | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Stomach, Forestomach | (10) | | (10) | | (10) | | (10) | | (10) | | (10) | |
| Epithelium, Hyperplasia | | | | | | | | | 1 [1.0] | | 5 [1.4] | |
| Stomach, Glandular | (10) | | (0) | | (0) | | (0) | | (1) | | (10) | |
| Epithelium, Cyst | | | | | | | | | 1 [1.0] | | | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | |
| Heart | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | |
| Adrenal Cortex | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |

a - Number of animals examined microscopically at site and number of animals with lesion
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Species/Strain: Mouse/B6C3F1

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CAS Number: 142-83-6

Date Report Requested: 10/21/2014

Time Report Requested: 18:35:59

First Dose M/F: NA / NA

Lab: SRI

| B6C3F1 Mouse FEMALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|---|----------|-----------------|------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|------------|-----------------|
| Adrenal Medulla | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Parathyroid Gland | (9) | | (0) | | (0) | | (0) | | (0) | | (8) | |
| Pituitary Gland | (9) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Thyroid Gland | (10) | | (0) | | (0) | | (0) | | (0) | | (9) | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | |
| None | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | |
| Clitoral Gland | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Ovary | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Uterus | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Hyperplasia, Stromal | 1 | [2.0] | | | | | | | | | | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | |
| Bone Marrow | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Lymph Node | (0) | | (0) | | (0) | | (0) | | (0) | | (1) | |
| Hyperplasia, Lymphoid | | | | | | | | | | | 1 | [2.0] |
| Lymph Node, Mandibular | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Lymph Node, Mesenteric | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Spleen | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Thymus | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | |
| Mammary Gland | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Skin | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Subcut Tiss, Foreign Body, Focal | 1 | [3.0] | | | | | | | | | | |
| Subcut Tiss, Inflammation, Suppurative, Focal | 1 | [3.0] | | | | | | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | |
| Bone | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/B6C3F1

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 AVERAGE SEVERITY GRADES[b]**
Test Compound: 2,4-Hexadienal
CAS Number: 142-83-6

Date Report Requested: 10/21/2014
Time Report Requested: 18:35:59
First Dose M/F: NA / NA
Lab: SRI

| B6C3F1 Mouse FEMALE | 0 | MG/KG/DY | 7.5 | MG/KG/DY | 15 | MG/KG/DY | 30 | MG/KG/DY | 60 | MG/KG/DY | 120 | MG/KG/DY |
|-------------------------|------|----------|------|----------|------|----------|------|----------|---------|----------|---------|----------|
| NERVOUS SYSTEM | | | | | | | | | | | | |
| Brain | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | |
| Lung | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Nose | (10) | | (10) | | (10) | | (10) | | (10) | | (10) | |
| Exudate | | | | | | | | | 1 [1.0] | | 1 [1.0] | |
| Olfactory Epi, Necrosis | | | | | | | | | | | 5 [1.6] | |
| Trachea | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | |
| None | | | | | | | | | | | | |
| URINARY SYSTEM | | | | | | | | | | | | |
| Kidney | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |
| Urinary Bladder | (10) | | (0) | | (0) | | (0) | | (0) | | (10) | |

**** END OF REPORT ****

a - Number of animals examined microscopically at site and number of animals with lesion
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)