P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

ALPHA-PINENE

CAS Number: 80-56-8

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

F1_M3

C Number:

C20302

Lock Date:

12/07/2005

Cage Range:

ALL

Date Range:

ALL

Reasons For Removal:

ALL

Removal Date Range:

ALL

Treatment Groups:

Include ALL

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

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Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

| B6C3F1 MICE MALE | control | 25 ppm | 50 ppm | 100 ppm | 200 ppm |
|--------------------------------------------------------------------|-----------------|----------|----------|-----------------|----------|
| Disposition Summary | | | | | |
| Animals Initially in Study Early Deaths Survivors | 10 | 10 | 10 | 10 | 10 |
| Terminal Sacrifice Animals Examined Microscopically | 10 10 | 10 10 | 10 10 | 10 10 | 10 10 |
| ALIMENTARY SYSTEM | | | | | |
| Gallbladder | (9) | (0) | (0) | (0) | (0) |
| Infiltration Cellular, Polymorphonuclear Pancreas Duct, Cyst | (10) | (0) | (0) | (1) 1 (100%) | (0) |
| CARDIOVASCULAR SYSTEM | | | | | |
| None | | | | | |
| ENDOCRINE SYSTEM | | | | | |
| Adrenal Cortex Hypertrophy | (10) 2 (20%) | (0) | (0) | (0) | (0) |
| GENERAL BODY SYSTEM | | | | | |
| None | | | | | |
| GENITAL SYSTEM | | | | | |
| None | | | | | |
| HEMATOPOIETIC SYSTEM | | | | | |
| None | | | | | |

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

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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ALPHA-PINENE

CAS Number: 80-56-8 Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

| B6C3F1 MICE MALE | control | 25 ppm | 50 ppm | 100 ppm | 200 ppm |
|------------------------------------------------------------------------|---------|--------|-----------------|----------------------------|-------------------|
| | | | | | |
| INTEGUMENTARY SYSTEM | | | | | |
| None | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| None | | | | | |
| NERVOUS SYSTEM | | | | | |
| None | | | | | |
| RESPIRATORY SYSTEM | | | | | |
| None | | | | | |
| SPECIAL SENSES SYSTEM | | | | | |
| None | | | | | |
| URINARY SYSTEM | | | | | |
| Kidney Dilatation | (10) | (10) | (10) 1 (10%) | (10) 1 (10%) | (10) |
| Nephropathy Urinary Bladder Transitional Epithelium, Hyperplasia | (10) | (10) | 1 (10%) (10) | 1 (10%) (10) 7 (70%) | (10) 10 (100%) |

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

TDMS No. 20302 - 04

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a) ALPHA-PINENE

Test Type: 90-DAY

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

| B6C3F1 MICE MALE | 400 ppm |
|-----------------------------------------------------------------------------------|------------------------|
| Disposition Summary | |
| Animals Initially in Study Early Deaths | 10 |
| Survivors Terminal Sacrifice Animals Examined Microscopically | 10 10 |
| ALIMENTARY SYSTEM | |
| Gallbladder Infiltration Cellular, Polymorphonuclear Pancreas Duct, Cyst | (7) 1 (14%) (10) |
| CARDIOVASCULAR SYSTEM | |
| None | |
| ENDOCRINE SYSTEM | |
| Adrenal Cortex Hypertrophy | (10) |
| GENERAL BODY SYSTEM | |
| None | |
| GENITAL SYSTEM | |
| None | |
| HEMATOPOIETIC SYSTEM | |
| None | |

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

Route: RESPIRATORY EXPOSURE WHOLE BODY

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

ALPHA-PINENE

CAS Number: 80-56-8

Species/Strain: MICE/B6C3F1 **Pathologist:** GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

| B6C3F1 MICE MALE | 400 ppm | | |
|--------------------------------------|-----------------|--|--|
| | | | |
| INTEGUMENTARY SYSTEM | | | |
| None | | | |
| MUSCULOSKELETAL SYSTEM | | | |
| None | | | |
| NERVOUS SYSTEM | | | |
| None | | | |
| RESPIRATORY SYSTEM | | | |
| None | | | |
| SPECIAL SENSES SYSTEM | | | |
| None | | | |
| URINARY SYSTEM | | | |
| Kidney | (10) | | |
| Dilatation Nephropathy | 1 (10%) | | |
| Nephropathy Urinary Bladder | 1 (10%) (10) | | |
| Transitional Epithelium, Hyperplasia | 10 (100%) | | |
| | . , | | |

*** END OF MALE ***

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

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

| B6C3F1 MICE FEMALE | control | 25 ppm | 50 ppm | 100 ppm | 200 ppm |
|---------------------------------------------------------|----------|----------|----------|----------|----------|
| Disposition Summary | | | | | |
| Animals Initially in Study Early Deaths Survivors | 10 | 10 | 10 | 10 | 10 |
| Terminal Sacrifice Animals Examined Microscopically | 10 10 | 10 10 | 10 10 | 10 10 | 10 10 |
| ALIMENTARY SYSTEM | | | | | |
| Stomach, Glandular Mineralization | (10) | (0) | (0) | (0) | (0) |
| CARDIOVASCULAR SYSTEM | | | | | |
| None | | | | | |
| ENDOCRINE SYSTEM | | | | | |
| None | | | | | |
| GENERAL BODY SYSTEM | | | | | |
| None | | | | | |
| GENITAL SYSTEM | | | | | |
| Ovary | (10) | (0) | (0) | (0) | (0) |
| HEMATOPOIETIC SYSTEM | | | | | |
| None | | | | | |

INTEGUMENTARY SYSTEM

None

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

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CAS Number: 80-56-8

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

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| B6C3F1 MICE FEMALE | control | 25 ppm | 50 ppm | 100 ppm | 200 ppm |
|------------------------------------------------------|-----------------|--------|-----------------|-----------------|-------------------|
| | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| None | | | | | |
| NERVOUS SYSTEM | | | | | |
| None | | | | | |
| RESPIRATORY SYSTEM | | | | | |
| Lung Alveolar Epithelium, Hyperplasia | (10) | (0) | (0) | (0) | (0) |
| SPECIAL SENSES SYSTEM | | | | | |
| None | | | | | |
| URINARY SYSTEM | | | | | |
| Kidney Nephropathy | (10) 2 (20%) | (10) | (10) 1 (10%) | (10) | (10) |
| Urinary Bladder Transitional Epithelium, Hyperplasia | (10) | (10) | (10) | (10) 6 (60%) | (10) 10 (100%) |

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

None

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ALPHA-PINENE

CAS Number: 80-56-8

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

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| B6C3F1 MICE FEMALE | 400 ppm | |
|---------------------------------------------------------------|-----------------|--|
| Disposition Summary | | |
| Animals Initially in Study Early Deaths | 10 | |
| Survivors Terminal Sacrifice Animals Examined Microscopically | 10 10 | |
| ALIMENTARY SYSTEM | | |
| Stomach, Glandular Mineralization | (10) 1 (10%) | |
| CARDIOVASCULAR SYSTEM | | |
| None | | |
| ENDOCRINE SYSTEM | | |
| None | | |
| GENERAL BODY SYSTEM | | |
| None | | |
| GENITAL SYSTEM | | |
| Ovary | (10) | |
| HEMATOPOIETIC SYSTEM | | |
| None | | |

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

Route: RESPIRATORY EXPOSURE WHOLE BODY

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ALPHA-PINENE

ALFIIA-FIINEINE

CAS Number: 80-56-8

Species/Strain: MICE/B6C3F1 **Pathologist:** GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006 Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

| B6C3F1 MICE FEMALE | 400 ppm |
|----------------------------------------------------------------------------------|--------------------------------------|
| | |
| MUSCULOSKELETAL SYSTEM | |
| None | |
| NERVOUS SYSTEM | |
| None | |
| RESPIRATORY SYSTEM | |
| Lung Alveolar Epithelium, Hyperplasia | (10) 1 (10%) |
| SPECIAL SENSES SYSTEM | |
| None | |
| URINARY SYSTEM | |
| Kidney Nephropathy Urinary Bladder Transitional Epithelium, Hyperplasia | (10) 1 (10%) (10) 10 (100%) |

*** END OF REPORT ***

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