

TDMS No. 20303 - 04

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

**Date Report Reqsted:** 08/18/2006

**Test Type:** 90-DAY

VINYLDENE CHLORIDE

**Time Report Reqsted:** 14:41:54

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**CAS Number:** 75-35-4

**First Dose M/F:** 10/11/04 / 10/11/04

**Species/Strain:** MICE/B6C3F1

**Pathologist:** THOMAS, K. - KOOISTRA, L. - HARBO, S.

**Lab:** BNW

F1\_M3

**C Number:** C20303  
**Lock Date:** 06/01/2005  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL

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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Pathologist: THOMAS, K. - KOOISTRA, L. - HARBO, S.

Lab: BNW

| B6C3F1 MICE MALE                  | CONTROL | 6.25 PPM | 12.5 PPM | 25 PPM  | 50 PPM  |
|-----------------------------------|---------|----------|----------|---------|---------|
| <b>Disposition Summary</b>        |         |          |          |         |         |
| Animals Initially in Study        | 10      | 10       | 10       | 10      | 10      |
| Early Deaths                      |         |          |          |         |         |
| Moribund Sacrifice                |         |          |          |         | 1       |
| Natural Death                     |         |          |          |         | 1       |
| Survivors                         |         |          |          |         |         |
| Terminal Sacrifice                | 10      | 10       | 10       | 10      | 8       |
| Animals Examined Microscopically  | 10      | 10       | 10       | 10      | 10      |
| <b>ALIMENTARY SYSTEM</b>          |         |          |          |         |         |
| Liver                             | (10)    | (10)     | (10)     | (10)    | (10)    |
| Hypertrophy                       |         |          |          |         | 1 [3.0] |
| Inflammation, Chronic Active      |         | 2 [1.0]  | 1 [1.0]  | 1 [1.0] |         |
| Necrosis                          |         |          |          |         | 2 [2.0] |
| <b>CARDIOVASCULAR SYSTEM</b>      |         |          |          |         |         |
| None                              |         |          |          |         |         |
| <b>ENDOCRINE SYSTEM</b>           |         |          |          |         |         |
| Adrenal Cortex                    | (10)    | (10)     | (10)     | (10)    | (10)    |
| Hypertrophy                       | 1 [1.0] |          |          |         |         |
| Subcapsular, Hyperplasia          | 7 [1.0] | 7 [1.0]  | 4 [1.0]  | 2 [1.0] | 3 [1.0] |
| <b>GENERAL BODY SYSTEM</b>        |         |          |          |         |         |
| None                              |         |          |          |         |         |
| <b>GENITAL SYSTEM</b>             |         |          |          |         |         |
| Testes                            | (10)    | (10)     | (10)     | (10)    | (10)    |
| Germinal Epithelium, Degeneration |         |          |          |         | 2 [2.0] |

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| B6C3F1 MICE MALE                                    | CONTROL | 6.25 PPM        | 12.5 PPM | 25 PPM  | 50 PPM          |
|---|---------|-----------------|----------|---------|-----------------|
| <b>HEMATOPOIETIC SYSTEM</b>                         |         |                 |          |         |                 |
| Lymph Node, Mandibular Atrophy                      | (5)     | (0)             | (0)      | (0)     | (5)<br>1 [3.0]  |
| Lymph Node, Mesenteric Atrophy                      | (10)    | (0)             | (0)      | (0)     | (10)<br>1 [4.0] |
| Spleen Necrosis                                     | (10)    | (10)            | (10)     | (10)    | 1 [3.0]<br>(10) |
| Spleen Lymphoid Follicle, Atrophy                   | (10)    | (10)            | (10)     | (10)    | 2 [4.0]<br>(10) |
| Thymus Necrosis                                     | (10)    | (0)             | (0)      | (0)     | (10)<br>2 [3.0] |
| <b>INTEGUMENTARY SYSTEM</b>                         |         |                 |          |         |                 |
| None  |         |                 |          |         |                 |
| <b>MUSCULOSKELETAL SYSTEM</b>                       |         |                 |          |         |                 |
| None  |         |                 |          |         |                 |
| <b>NERVOUS SYSTEM</b>                               |         |                 |          |         |                 |
| None  |         |                 |          |         |                 |
| <b>RESPIRATORY SYSTEM</b>                           |         |                 |          |         |                 |
| Larynx Inflammation                                 | (10)    | (10)<br>1 [1.0] | (10)     | (10)    | (10)            |
| Larynx Necrosis                                     |         |                 | 1 [1.0]  |         |                 |
| Larynx Respiratory Epithelium, Metaplasia, Squamous |         |                 |          | 1 [1.0] | 4 [1.0]         |
| Lung Bronchiole, Epithelium, Hyperplasia            | (10)    | (10)            | (10)     | (10)    | (10)<br>8 [1.6] |
| Lung Bronchiole, Epithelium, Metaplasia             |         |                 |          |         | 1 [2.0]         |
| Lung Bronchus, Epithelium, Hyperplasia              |         |                 |          |         | 1 [2.0]         |
| Lung Bronchus, Epithelium, Metaplasia               |         |                 |          |         | 1 [2.0]         |

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| B6C3F1 MICE MALE                        | CONTROL  | 6.25 PPM | 12.5 PPM | 25 PPM   | 50 PPM  |
|---|----------|----------|----------|----------|---------|
| Bronchus, Epithelium, Necrosis          |          |          |          |          | 1 [1.0] |
| Nose                                    | (10)     | (10)     | (10)     | (10)     | (10)    |
| Inflammation, Chronic Active            |          |          |          |          | 1 [1.0] |
| Vomeronasal Organ, Inflammation         |          |          |          |          | 1 [1.0] |
| <b>SPECIAL SENSES SYSTEM</b>            |          |          |          |          |         |
| None                                    |          |          |          |          |         |
| <b>URINARY SYSTEM</b>                   |          |          |          |          |         |
| Kidney                                  | (10)     | (10)     | (10)     | (10)     | (10)    |
| Infiltration Cellular, Mononuclear Cell |          |          |          | 1 [1.0]  | 1 [2.0] |
| Nephropathy                             |          |          | 5 [1.2]  | 10 [1.9] | 8 [2.5] |
| Renal Tubule, Casts Protein             |          |          |          |          | 2 [4.0] |
| Renal Tubule, Mineralization            |          |          |          | 1 [2.0]  | 1 [1.0] |
| Renal Tubule, Necrosis                  |          |          |          |          | 2 [4.0] |
| Renal Tubule, Vacuolization Cytoplasmic | 10 [2.4] |          |          | 10 [1.0] | 8 [1.0] |

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

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Species/Strain: MICE/B6C3F1

Pathologist: THOMAS, K. - KOOISTRA, L. - HARBO, S.

Lab: BNW

| B6C3F1 MICE FEMALE                | CONTROL  | 6.25 PPM | 12.5 PPM | 25 PPM   | 50 PPM   | 100 PPM  |
|-----------------------------------|----------|----------|----------|----------|----------|----------|
| <b>Disposition Summary</b>        |          |          |          |          |          |          |
| Animals Initially in Study        | 10       | 10       | 10       | 10       | 10       | 10       |
| Early Deaths                      |          |          |          |          |          |          |
| Moribund Sacrifice                |          |          |          |          |          | 1        |
| Natural Death                     |          |          |          |          |          | 3        |
| Survivors                         |          |          |          |          |          |          |
| Terminal Sacrifice                | 10       | 10       | 10       | 10       | 10       | 6        |
| Animals Examined Microscopically  | 10       | 10       | 10       | 10       | 10       | 10       |
| <b>ALIMENTARY SYSTEM</b>          |          |          |          |          |          |          |
| Intestine Small, Ileum            | (10)     | (0)      | (0)      | (0)      | (0)      | (9)      |
| Lymphoid Tissue, Necrosis         |          |          |          |          |          | 1 [1.0]  |
| Intestine Small, Jejunum          | (10)     | (0)      | (0)      | (0)      | (0)      | (8)      |
| Lymphoid Tissue, Necrosis         |          |          |          |          |          | 1 [1.0]  |
| Liver                             | (10)     | (10)     | (10)     | (10)     | (10)     | (10)     |
| Hypertrophy                       |          |          |          |          |          | 6 [2.8]  |
| Inflammation, Chronic Active      |          | 1 [1.0]  | 4 [1.0]  | 3 [1.0]  | 1 [1.0]  | 1 [1.0]  |
| Necrosis                          |          |          | 1 [1.0]  |          |          | 4 [4.0]  |
| Stomach, Forestomach              | (10)     | (0)      | (0)      | (0)      | (0)      | (10)     |
| Hemorrhage                        |          |          |          |          |          | 1 [2.0]  |
| Stomach, Glandular                | (10)     | (0)      | (0)      | (0)      | (0)      | (10)     |
| Hemorrhage                        |          |          |          |          |          | 1 [2.0]  |
| <b>CARDIOVASCULAR SYSTEM</b>      |          |          |          |          |          |          |
| Heart                             | (10)     | (0)      | (0)      | (0)      | (0)      | (10)     |
| Mineralization                    |          |          |          |          |          | 1 [1.0]  |
| <b>ENDOCRINE SYSTEM</b>           |          |          |          |          |          |          |
| Adrenal Cortex                    | (10)     | (10)     | (10)     | (10)     | (10)     | (10)     |
| Subcapsular, Hyperplasia          | 10 [2.3] | 10 [2.3] | 10 [2.2] | 10 [2.1] | 10 [2.1] | 9 [1.8]  |
| X-zone, Vacuolization Cytoplasmic | 10 [3.1] | 10 [2.8] | 10 [2.3] | 10 [2.2] | 10 [2.1] | 10 [1.3] |

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| B6C3F1 MICE FEMALE  | CONTROL        | 6.25 PPM | 12.5 PPM | 25 PPM           | 50 PPM           | 100 PPM                    |
|---|----------------|----------|----------|------------------|------------------|----------------------------|
| <b>GENERAL BODY SYSTEM</b>  |                |          |          |                  |                  |                            |
| None  |                |          |          |                  |                  |                            |
| <b>GENITAL SYSTEM</b>   |                |          |          |                  |                  |                            |
| Clitoral Gland<br>Inflammation, Chronic Active                      | (9)<br>1 [1.0] | (0)      | (0)      | (0)              | (0)              | (9)                        |
| <b>HEMATOPOIETIC SYSTEM</b>   |                |          |          |                  |                  |                            |
| Lymph Node, Mandibular<br>Necrosis                                  | (7)            | (0)      | (0)      | (0)              | (0)              | (6)<br>2 [2.0]             |
| Lymph Node, Mesenteric<br>Necrosis                                  | (10)           | (0)      | (0)      | (0)              | (0)              | (10)<br>4 [2.0]            |
| Spleen<br>Lymphoid Follicle, Atrophy<br>Lymphoid Follicle, Necrosis | (10)           | (10)     | (10)     | (10)             | (10)             | (10)<br>3 [3.0]<br>3 [2.0] |
| Thymus<br>Necrosis  | (10)           | (0)      | (0)      | (0)              | (0)              | (10)<br>5 [2.6]            |
| <b>INTEGUMENTARY SYSTEM</b>   |                |          |          |                  |                  |                            |
| Mammary Gland<br>Hyperplasia  | (10)           | (10)     | (10)     | (10)<br>10 [1.0] | (10)<br>10 [1.0] | (10)<br>6 [1.0]            |
| <b>MUSCULOSKELETAL SYSTEM</b>                                       |                |          |          |                  |                  |                            |
| None  |                |          |          |                  |                  |                            |
| <b>NERVOUS SYSTEM</b>   |                |          |          |                  |                  |                            |
| None  |                |          |          |                  |                  |                            |
| <b>RESPIRATORY SYSTEM</b>   |                |          |          |                  |                  |                            |
| Larynx  | (10)           | (10)     | (10)     | (10)             | (9)              | (10)                       |

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| B6C3F1 MICE FEMALE                                   | CONTROL | 6.25 PPM | 12.5 PPM | 25 PPM  | 50 PPM   | 100 PPM |
|--|---------|----------|----------|---------|----------|---------|
| Exudate  |         |          |          |         |          | 2 [1.0] |
| Inflammation   |         |          |          |         |          | 3 [1.0] |
| Necrosis   |         |          |          |         |          | 4 [1.0] |
| Respiratory Epithelium, Hyperplasia                  |         |          |          |         |          | 8 [1.4] |
| Respiratory Epithelium, Metaplasia,<br>Squamous      | 1 [1.0] |          | 1 [2.0]  | 3 [1.3] | 9 [1.8]  | 7 [2.4] |
| Squamous Epithelium, Hyperplasia                     |         |          |          |         |          | 8 [1.3] |
| Lung   | (10)    | (10)     | (10)     | (10)    | (10)     | (10)    |
| Infiltration Cellular, Mixed Cell                    | 1 [1.0] |          |          |         |          | 6 [1.7] |
| Inflammation, Histiocytic                            |         |          |          |         |          | 1 [1.0] |
| Metaplasia, Osseous                                  |         |          |          |         |          | 1 [1.0] |
| Artery, Hypertrophy                                  | 1 [1.0] |          |          |         |          |         |
| Bronchiole, Epithelium, Hyperplasia                  |         |          |          | 2 [1.0] | 10 [2.0] | 5 [2.0] |
| Bronchiole, Epithelium, Metaplasia                   |         |          |          |         |          | 4 [2.0] |
| Bronchiole, Epithelium, Necrosis                     |         |          |          |         |          | 1 [1.0] |
| Bronchus, Epithelium, Hyperplasia                    |         |          |          |         |          | 1 [1.0] |
| Bronchus, Epithelium, Metaplasia                     |         |          |          |         |          | 2 [1.5] |
| Bronchus, Epithelium, Necrosis                       |         |          |          |         |          | 6 [2.7] |
| Nose   | (10)    | (10)     | (10)     | (10)    | (10)     | (10)    |
| Inflammation, Suppurative                            |         |          |          |         |          | 1 [1.0] |
| Respiratory Epithelium, Necrosis                     |         |          |          |         |          | 4 [2.5] |
| Respiratory Epithelium, Vacuolization<br>Cytoplasmic |         |          |          |         |          | 3 [1.7] |
| Squamous Epithelium, Vacuolization<br>Cytoplasmic    |         |          |          |         |          | 2 [2.0] |
| Turbinates, Atrophy                                  |         |          |          |         |          | 4 [1.0] |
| Trachea  | (10)    | (10)     | (10)     | (10)    | (10)     | (10)    |
| Epithelium, Hyperplasia                              |         |          | 2 [1.0]  |         | 5 [1.0]  | 8 [1.8] |
| Epithelium, Metaplasia, Squamous                     |         |          |          |         | 1 [1.0]  | 3 [1.0] |
| Epithelium, Necrosis                                 | 1 [1.0] | 1 [1.0]  |          |         |          | 2 [1.0] |
| <b>SPECIAL SENSES SYSTEM</b>                         |         |          |          |         |          |         |
| None   |         |          |          |         |          |         |
| <b>URINARY SYSTEM</b>                                |         |          |          |         |          |         |
| Kidney   | (10)    | (10)     | (10)     | (10)    | (10)     | (10)    |
| Renal Tubule, Inflammation                           |         |          |          | 1 [1.0] |          |         |

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Lab: BNW

| B6C3F1 MICE FEMALE                  | CONTROL | 6.25 PPM | 12.5 PPM       | 25 PPM | 50 PPM | 100 PPM |
|-------------------------------------|---------|----------|----------------|--------|--------|---------|
| Ureter<br>Vacuolization Cytoplasmic | (0)     | (0)      | (1)<br>1 [3.0] | (0)    | (0)    | (0)     |

\*\*\* END OF REPORT \*\*\*

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