

**TDMS No.** 05174 - 05  
**Test Type:** CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** RATS/F 344

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**  
CRESOLS  
**CAS Number:** 1319-77-3  
**Pathologist:** BOYCE, J. - JOKINEN, M. - RYAN, M.  
F1\_R2Males

**Date Report Reqsted:** 04/10/2006  
**Time Report Reqsted:** 08:44:01  
**First Dose M/F:** 08/05/02 / NA  
**Lab:** BAT

**C Number:** C62260B  
**Lock Date:** 02/09/2005  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE            | 0 PPM | 1500 PPM | 5000 PPM | 15000 PPM |
|----------------------------------|-------|----------|----------|-----------|
| <b>Disposition Summary</b>       |       |          |          |           |
| Animals Initially in Study       | 50    | 50       | 50       | 50        |
| Early Deaths                     |       |          |          |           |
| Moribund Sacrifice               | 12    | 10       | 9        | 14        |
| Natural Death                    | 5     | 6        | 8        | 5         |
| Survivors                        |       |          |          |           |
| Terminal Sacrifice               | 33    | 34       | 33       | 31        |
| Animals Examined Microscopically | 50    | 50       | 50       | 50        |

ALIMENTARY SYSTEM

|                                  |          |          |          |          |
|----------------------------------|----------|----------|----------|----------|
| Esophagus                        | (50)     | (50)     | (50)     | (49)     |
| Intestine Large, Cecum           | (50)     | (50)     | (50)     | (49)     |
| Parasite Metazoan                |          | 1 (2%)   |          |          |
| Intestine Large, Colon           | (50)     | (50)     | (50)     | (50)     |
| Parasite Metazoan                | 4 (8%)   | 3 (6%)   | 3 (6%)   | 2 (4%)   |
| Intestine Large, Rectum          | (50)     | (50)     | (50)     | (50)     |
| Edema                            | 1 (2%)   |          |          |          |
| Parasite Metazoan                | 4 (8%)   | 5 (10%)  | 4 (8%)   | 2 (4%)   |
| Intestine Small, Duodenum        | (49)     | (50)     | (50)     | (49)     |
| Intestine Small, Ileum           | (50)     | (50)     | (50)     | (49)     |
| Intestine Small, Jejunum         | (50)     | (50)     | (50)     | (49)     |
| Liver                            | (50)     | (50)     | (50)     | (50)     |
| Angiectasis                      | 5 (10%)  | 5 (10%)  | 7 (14%)  | 14 (28%) |
| Basophilic Focus                 | 24 (48%) | 18 (36%) | 17 (34%) | 7 (14%)  |
| Clear Cell Focus                 | 25 (50%) | 20 (40%) | 25 (50%) | 27 (54%) |
| Degeneration, Cystic             | 7 (14%)  | 9 (18%)  | 12 (24%) | 9 (18%)  |
| Eosinophilic Focus               | 14 (28%) | 14 (28%) | 13 (26%) | 23 (46%) |
| Fatty Change                     | 17 (34%) | 20 (40%) | 9 (18%)  | 8 (16%)  |
| Fibrosis                         | 29 (58%) | 30 (60%) | 29 (58%) | 34 (68%) |
| Hematopoietic Cell Proliferation | 2 (4%)   | 1 (2%)   |          |          |
| Hepatodiaphragmatic Nodule       | 2 (4%)   | 5 (10%)  | 3 (6%)   | 3 (6%)   |
| Inflammation                     | 35 (70%) | 29 (58%) | 37 (74%) | 38 (76%) |
| Mixed Cell Focus                 | 5 (10%)  | 3 (6%)   | 3 (6%)   | 2 (4%)   |
| Necrosis                         | 1 (2%)   | 3 (6%)   | 1 (2%)   | 2 (4%)   |
| Regeneration                     |          | 2 (4%)   |          |          |
| Tension Lipidosis                |          |          | 1 (2%)   |          |
| Bile Duct, Cyst                  | 1 (2%)   | 2 (4%)   | 1 (2%)   |          |

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE            | 0 PPM    | 1500 PPM | 5000 PPM | 15000 PPM |
|----------------------------------|----------|----------|----------|-----------|
| Bile Duct, Hyperplasia           | 47 (94%) | 46 (92%) | 46 (92%) | 45 (90%)  |
| Centrilobular, Degeneration      | 3 (6%)   | 5 (10%)  | 3 (6%)   | 4 (8%)    |
| Centrilobular, Necrosis          | 2 (4%)   |          | 1 (2%)   | 1 (2%)    |
| Hepatocyte, Hypertrophy          | 1 (2%)   |          |          |           |
| Mesentery                        | (5)      | (7)      | (9)      | (8)       |
| Accessory Spleen                 |          | 1 (14%)  | 1 (11%)  |           |
| Fat, Necrosis                    | 4 (80%)  | 6 (86%)  | 8 (89%)  | 7 (88%)   |
| Oral Mucosa                      | (0)      | (1)      | (0)      | (2)       |
| Inflammation                     |          | 1 (100%) |          | 1 (50%)   |
| Pancreas                         | (49)     | (50)     | (50)     | (49)      |
| Acinus, Atrophy                  | 18 (37%) | 18 (36%) | 16 (32%) | 12 (24%)  |
| Acinus, Hyperplasia              | 2 (4%)   |          | 3 (6%)   | 3 (6%)    |
| Artery, Inflammation             |          | 1 (2%)   |          |           |
| Duct, Cyst                       | 10 (20%) | 10 (20%) | 8 (16%)  | 7 (14%)   |
| Salivary Glands                  | (49)     | (50)     | (50)     | (49)      |
| Submandibular Gland, Hyperplasia | 1 (2%)   |          |          |           |
| Stomach, Forestomach             | (49)     | (50)     | (50)     | (50)      |
| Inflammation                     | 3 (6%)   | 1 (2%)   | 1 (2%)   | 2 (4%)    |
| Ulcer                            | 2 (4%)   | 2 (4%)   |          |           |
| Epithelium, Hyperplasia          |          |          |          | 1 (2%)    |
| Stomach, Glandular               | (49)     | (50)     | (50)     | (50)      |
| Inflammation                     | 1 (2%)   |          |          | 1 (2%)    |
| Ulcer                            |          |          | 1 (2%)   |           |
| Epithelium, Hyperplasia          |          | 1 (2%)   | 1 (2%)   |           |
| Tongue                           | (0)      | (1)      | (1)      | (0)       |
| <b>CARDIOVASCULAR SYSTEM</b>     |          |          |          |           |
| Heart                            | (50)     | (50)     | (50)     | (50)      |
| Cardiomyopathy                   | 42 (84%) | 46 (92%) | 42 (84%) | 42 (84%)  |
| Atrium, Thrombosis               | 2 (4%)   | 1 (2%)   |          |           |
| Myocardium, Fibrosis             |          | 1 (2%)   |          |           |
| Myocardium, Mineralization       | 1 (2%)   |          |          |           |
| Ventricle, Thrombosis            |          | 1 (2%)   |          |           |
| <b>ENDOCRINE SYSTEM</b>          |          |          |          |           |
| Adrenal Cortex                   | (50)     | (50)     | (50)     | (50)      |
| Angiectasis                      |          | 1 (2%)   |          |           |
| Hyperplasia                      | 12 (24%) | 11 (22%) | 10 (20%) | 7 (14%)   |

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

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE           | 0 PPM    | 1500 PPM | 5000 PPM | 15000 PPM |
|---------------------------------|----------|----------|----------|-----------|
| Necrosis                        | 1 (2%)   |          | 4 (8%)   |           |
| Vacuolization Cytoplasmic       | 25 (50%) | 22 (44%) | 21 (42%) | 19 (38%)  |
| Adrenal Medulla                 | (50)     | (50)     | (50)     | (50)      |
| Angiectasis                     | 2 (4%)   |          |          |           |
| Hyperplasia                     | 10 (20%) | 12 (24%) | 11 (22%) | 8 (16%)   |
| Infiltration Cellular, Lymphoid |          | 1 (2%)   |          |           |
| Necrosis                        | 1 (2%)   |          |          |           |
| Islets, Pancreatic              | (49)     | (50)     | (50)     | (49)      |
| Hyperplasia                     | 2 (4%)   | 2 (4%)   | 1 (2%)   | 4 (8%)    |
| Parathyroid Gland               | (46)     | (50)     | (49)     | (46)      |
| Hyperplasia                     |          |          |          | 1 (2%)    |
| Pituitary Gland                 | (50)     | (50)     | (49)     | (50)      |
| Angiectasis                     | 19 (38%) | 9 (18%)  | 12 (24%) | 8 (16%)   |
| Cyst                            | 5 (10%)  | 5 (10%)  | 7 (14%)  | 6 (12%)   |
| Pars Distalis, Hyperplasia      | 14 (28%) | 13 (26%) | 14 (29%) | 12 (24%)  |
| Pars Intermedia, Hyperplasia    |          |          |          | 1 (2%)    |
| Thyroid Gland                   | (50)     | (50)     | (50)     | (49)      |
| Cyst                            | 2 (4%)   | 2 (4%)   |          |           |
| C-cell, Hyperplasia             | 25 (50%) | 21 (42%) | 17 (34%) | 6 (12%)   |
| Follicular Cell, Cyst           |          |          | 4 (8%)   |           |
| Follicular Cell, Hyperplasia    | 1 (2%)   | 1 (2%)   | 1 (2%)   | 4 (8%)    |
| <b>GENERAL BODY SYSTEM</b>      |          |          |          |           |
| Tissue NOS                      | (0)      | (0)      | (0)      | (1)       |
| <b>GENITAL SYSTEM</b>           |          |          |          |           |
| Epididymis                      | (50)     | (50)     | (50)     | (50)      |
| Granuloma Sperm                 | 1 (2%)   | 1 (2%)   | 1 (2%)   |           |
| Inflammation                    |          |          | 2 (4%)   | 1 (2%)    |
| Preputial Gland                 | (50)     | (50)     | (50)     | (49)      |
| Cyst                            |          |          | 1 (2%)   |           |
| Hyperplasia                     |          | 3 (6%)   | 4 (8%)   |           |
| Inflammation                    | 47 (94%) | 49 (98%) | 45 (90%) | 44 (90%)  |
| Prostate                        | (50)     | (50)     | (50)     | (50)      |
| Atrophy                         |          |          | 2 (4%)   |           |
| Cyst                            |          | 1 (2%)   |          |           |
| Hyperplasia                     | 20 (40%) | 20 (40%) | 16 (32%) | 22 (44%)  |
| Inflammation                    | 25 (50%) | 19 (38%) | 26 (52%) | 19 (38%)  |

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

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE                 | 0 PPM    | 1500 PPM | 5000 PPM | 15000 PPM |
|---------------------------------------|----------|----------|----------|-----------|
| Seminal Vesicle                       | (50)     | (50)     | (50)     | (50)      |
| Atrophy                               |          | 1 (2%)   | 1 (2%)   |           |
| Hyperplasia                           |          |          |          | 1 (2%)    |
| Inflammation                          |          |          |          | 1 (2%)    |
| Testes                                | (50)     | (50)     | (50)     | (50)      |
| Arteriole, Inflammation               | 1 (2%)   |          |          |           |
| Germinal Epithelium, Atrophy          | 1 (2%)   | 1 (2%)   |          |           |
| Interstitial Cell, Hyperplasia        |          |          |          | 2 (4%)    |
| <b>HEMATOPOIETIC SYSTEM</b>           |          |          |          |           |
| Bone Marrow                           | (50)     | (50)     | (50)     | (50)      |
| Fibrosis                              | 1 (2%)   |          |          | 1 (2%)    |
| Hyperplasia                           | 5 (10%)  | 2 (4%)   | 6 (12%)  | 7 (14%)   |
| Necrosis                              | 1 (2%)   |          |          |           |
| Lymph Node                            | (4)      | (5)      | (5)      | (4)       |
| Mediastinal, Ectasia                  |          |          |          | 1 (25%)   |
| Mediastinal, Hyperplasia, Lymphoid    |          | 1 (20%)  |          |           |
| Pancreatic, Hyperplasia, Lymphoid     |          |          | 1 (20%)  |           |
| Pancreatic, Pigmentation, Hemosiderin |          |          |          | 1 (25%)   |
| Lymph Node, Mesenteric                | (49)     | (50)     | (50)     | (50)      |
| Hyperplasia, Lymphoid                 |          |          |          | 1 (2%)    |
| Spleen                                | (49)     | (50)     | (50)     | (49)      |
| Atrophy                               | 1 (2%)   | 2 (4%)   | 3 (6%)   | 2 (4%)    |
| Fibrosis                              | 1 (2%)   |          | 1 (2%)   | 1 (2%)    |
| Hematopoietic Cell Proliferation      | 17 (35%) | 16 (32%) | 23 (46%) | 18 (37%)  |
| Infiltration Cellular, Histiocyte     |          |          |          | 1 (2%)    |
| Artery, Hyperplasia                   |          |          | 1 (2%)   |           |
| Artery, Inflammation                  |          |          | 1 (2%)   |           |
| Thymus                                | (47)     | (43)     | (47)     | (48)      |
| Atrophy                               | 44 (94%) | 39 (91%) | 43 (91%) | 47 (98%)  |
| Cyst                                  |          |          | 1 (2%)   | 1 (2%)    |
| Ectopic Parathyroid Gland             |          |          |          | 1 (2%)    |
| <b>INTEGUMENTARY SYSTEM</b>           |          |          |          |           |
| Mammary Gland                         | (49)     | (50)     | (50)     | (49)      |
| Hyperplasia                           | 6 (12%)  | 10 (20%) | 6 (12%)  | 8 (16%)   |
| Skin                                  | (50)     | (50)     | (50)     | (50)      |
| Cyst Epithelial Inclusion             | 1 (2%)   |          | 1 (2%)   |           |

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

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE                        | 0 PPM    | 1500 PPM | 5000 PPM | 15000 PPM |
|--|----------|----------|----------|-----------|
| Hyperkeratosis                               | 1 (2%)   | 1 (2%)   |          |           |
| Inflammation                                 |          |          | 2 (4%)   |           |
| Epidermis, Hyperplasia                       |          |          | 1 (2%)   |           |
| Hair Follicle, Atrophy                       |          | 1 (2%)   |          |           |
| Subcutaneous Tissue, Metaplasia, Osseous     |          |          | 1 (2%)   |           |
| Subcutaneous Tissue, Necrosis                |          | 1 (2%)   |          |           |
| <b>MUSCULOSKELETAL SYSTEM</b>                |          |          |          |           |
| Bone   | (50)     | (50)     | (50)     | (50)      |
| Hyperostosis                                 |          |          |          | 1 (2%)    |
| Joint, Inflammation                          | 1 (2%)   |          |          | 3 (6%)    |
| <b>NERVOUS SYSTEM</b>                        |          |          |          |           |
| Brain  | (50)     | (50)     | (50)     | (50)      |
| Hydrocephalus                                | 7 (14%)  | 4 (8%)   | 4 (8%)   | 4 (8%)    |
| Hypothalamus, Compression                    | 6 (12%)  | 4 (8%)   | 4 (8%)   | 4 (8%)    |
| <b>RESPIRATORY SYSTEM</b>                    |          |          |          |           |
| Lung   | (50)     | (50)     | (50)     | (50)      |
| Congestion                                   |          |          | 1 (2%)   | 1 (2%)    |
| Fibrosis                                     |          | 1 (2%)   |          |           |
| Inflammation                                 | 26 (52%) | 25 (50%) | 23 (46%) | 24 (48%)  |
| Metaplasia, Osseous                          |          | 2 (4%)   | 1 (2%)   | 1 (2%)    |
| Metaplasia, Squamous                         |          |          | 1 (2%)   |           |
| Alveolar Epithelium, Hyperplasia             | 7 (14%)  | 5 (10%)  | 8 (16%)  | 4 (8%)    |
| Nose   | (50)     | (50)     | (50)     | (50)      |
| Hyperplasia                                  |          |          |          | 1 (2%)    |
| Inflammation                                 | 17 (34%) | 19 (38%) | 19 (38%) | 28 (56%)  |
| Goblet Cell, Hyperplasia                     | 23 (46%) | 40 (80%) | 42 (84%) | 47 (94%)  |
| Respiratory Epithelium, Hyperplasia          | 3 (6%)   | 17 (34%) | 31 (62%) | 47 (94%)  |
| Respiratory Epithelium, Metaplasia, Squamous |          | 1 (2%)   | 8 (16%)  | 40 (80%)  |
| Vein, Thrombosis                             |          |          | 2 (4%)   | 2 (4%)    |
| Trachea                                      | (50)     | (50)     | (50)     | (49)      |
| Inflammation                                 |          |          | 1 (2%)   |           |

TDMS No. 05174 - 05  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/F 344

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)  
 CRESOLS  
 CAS Number: 1319-77-3  
 Pathologist: BOYCE, J. - JOKINEN, M. - RYAN, M.

Date Report Requested: 04/10/2006  
 Time Report Requested: 08:44:01  
 First Dose M/F: 08/05/02 / NA  
 Lab: BAT

| FISCHER 344 RATS MALE                | 0 PPM    | 1500 PPM | 5000 PPM | 15000 PPM |
|--------------------------------------|----------|----------|----------|-----------|
| <b>SPECIAL SENSES SYSTEM</b>         |          |          |          |           |
| Eye                                  | (49)     | (50)     | (50)     | (50)      |
| Cataract                             | 1 (2%)   | 3 (6%)   |          | 1 (2%)    |
| Inflammation                         | 1 (2%)   |          |          |           |
| Choroid, Inflammation                |          | 1 (2%)   |          |           |
| Optic Nerve, Atrophy                 |          | 2 (4%)   |          |           |
| Retina, Atrophy                      | 1 (2%)   | 4 (8%)   |          | 1 (2%)    |
| Sclera, Metaplasia, Osseous          | 16 (33%) | 29 (58%) | 28 (56%) | 15 (30%)  |
| Harderian Gland                      | (49)     | (50)     | (50)     | (50)      |
| Atrophy                              |          |          | 2 (4%)   | 2 (4%)    |
| Cyst                                 |          | 1 (2%)   |          |           |
| Hyperplasia                          | 1 (2%)   |          |          |           |
| Inflammation                         | 1 (2%)   | 6 (12%)  | 5 (10%)  | 3 (6%)    |
| Zymbal's Gland                       | (1)      | (2)      | (0)      | (2)       |
| <b>URINARY SYSTEM</b>                |          |          |          |           |
| Kidney                               | (50)     | (50)     | (50)     | (50)      |
| Accumulation, Hyaline Droplet        | 1 (2%)   |          |          |           |
| Hydronephrosis                       |          |          | 1 (2%)   |           |
| Infarct                              | 1 (2%)   |          | 1 (2%)   |           |
| Necrosis                             | 2 (4%)   | 1 (2%)   | 1 (2%)   | 4 (8%)    |
| Nephropathy                          | 47 (94%) | 48 (96%) | 46 (92%) | 49 (98%)  |
| Capsule, Lymphangiectasis            |          | 1 (2%)   |          |           |
| Renal Tubule, Cyst                   |          | 2 (4%)   |          |           |
| Renal Tubule, Hyperplasia            | 2 (4%)   |          |          | 1 (2%)    |
| Renal Tubule, Inflammation           |          |          | 1 (2%)   | 3 (6%)    |
| Renal Tubule, Mineralization         |          |          |          | 1 (2%)    |
| Transitional Epithelium, Hyperplasia |          |          | 2 (4%)   | 8 (16%)   |
| Ureter                               | (1)      | (0)      | (1)      | (0)       |
| Cyst                                 |          |          | 1 (100%) |           |
| Inflammation                         | 1 (100%) |          |          |           |
| Urinary Bladder                      | (49)     | (50)     | (50)     | (50)      |
| Inflammation                         | 1 (2%)   |          | 1 (2%)   |           |

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

**TDMS No.** 05174 - 05  
**Test Type:** CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** RATS/F 344

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**  
CRESOLS  
**CAS Number:** 1319-77-3  
**Pathologist:** BOYCE, J. - JOKINEN, M. - RYAN, M.

**Date Report Requested:** 04/10/2006  
**Time Report Requested:** 08:44:01  
**First Dose M/F:** 08/05/02 / NA  
**Lab:** BAT

---

| FISCHER 344 RATS MALE | 0 PPM | 1500 PPM | 5000 PPM | 15000 PPM |
|-----------------------|-------|----------|----------|-----------|
|-----------------------|-------|----------|----------|-----------|

---

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