| Experiment Number: 10987 - 02 | P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a) | Date Report Requested: 06/04/2018 |
|-------------------------------|--|-------------------------------------|
| Test Type: CHRONIC | Dibutyl Phthalate | Time Report Requested: 09:07:59 |
| Route: DOSED FEED | CAS Number: 84-74-2 | First Dose M/F: 08/17/10 / 08/16/10 |
| Species/Strain: MICE/B6C3F1/N | | Lab: BAT |
| | | |

Mice_Final Version 1

| NTP Study Number: | C10987 |
|----------------------|-------------|
| Lock Date: | 11/26/2013 |
| Cage Range: | ALL |
| Date Range: | ALL |
| Reasons For Removal: | ALL |
| Removal Date Range: | ALL |
| Treatment Groups: | Include ALL |
| Study Gender: | Both |
| TDMSE Version: | 3.0.2.3_002 |
| PWG Approval Date: | NONE |
| | |

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|----------|----------|----------|-----------|--|
| Disposition Summary | | | | | |
| Animals Initially In Study | 50 | 50 | 50 | 50 | |
| Early Deaths | | | | | |
| Moribund Sacrifice | 2 | 2 | 1 | 2 | |
| Natural Death | 4 | 8 | 11 | 5 | |
| Survivors | | | | | |
| Moribund Sacrifice | | | 2 | | |
| Natural Death | | 1 | | | |
| Terminal Sacrifice | 44 | 39 | 36 | 43 | |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 | |
| ALIMENTARY SYSTEM | | | | | |
| | | (50) | (50) | (10) | |
| Esophagus | (50) | (50) | (50) | (49) | |
| Gallbladder | (50) | (48) | (49) | (49) | |
| Inflammation, Chronic Active | | 1 (2%) | | | |
| Intestine Large, Cecum | (50) | (49) | (49) | (50) | |
| Intestine Large, Colon | (50) | (49) | (49) | (50) | |
| Intestine Large, Rectum | (50) | (49) | (50) | (50) | |
| Intestine Small, Duodenum | (50) | (49) | (48) | (50) | |
| Intestine Small, Ileum | (49) | (49) | (48) | (50) | |
| Inflammation, Chronic Active | | | 2 (4%) | | |
| Epithelium, Hyperplasia | | | 1 (2%) | | |
| Intestine Small, Jejunum | (50) | (49) | (48) | (50) | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Ulcer | 1 (2%) | 1 (2%) | | | |
| Epithelium, Hyperplasia | | 1 (2%) | | | |
| Peyer's Patch, Hyperplasia, Lymphocyte | 2 (4%) | · | 2 (4%) | 4 (8%) | |
| Liver | (50) | (50) | (50) | (50) | |
| Amyloid | | 1 (2%) | | | |
| Angiectasis | 1 (2%) | 1 (2%) | | | |
| Basophilic Focus | 4 (8%) | 4 (8%) | 6 (12%) | 3 (6%) | |
| Clear Cell Focus | 10 (20%) | 15 (30%) | 9 (18%) | 5 (10%) | |
| Eosinophilic Focus | 7 (14%) | 12 (24%) | 8 (16%) | 1 (2%) | |
| Extramedullary Hematopoiesis | . , | 4 (8%) | . , | 1 (2%) | |

Experiment Number: 10987 - 02 Test Type: CHRONIC Route: DOSED FEED

Species/Strain: MICE/B6C3F1/N

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|----------|------------|----------|---------------------------------------|--|
| Fatty Change | 4 (8%) | 2 (4%) | 3 (6%) | | |
| Fatty Change, Focal | | 1 (2%) | | | |
| Hemorrhage | 1 (2%) | | | | |
| Infiltration Cellular, Mononuclear Cell | | 2 (4%) | | | |
| Inflammation, Granulomatous | | | | 1 (2%) | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Mineral | | | | 1 (2%) | |
| Mixed Cell Focus | 10 (20%) | 10 (20%) | 5 (10%) | 3 (6%) | |
| Necrosis | 4 (8%) | 7 (14%) | 6 (12%) | 7 (14%) | |
| Pigment | 1 (2%) | | | 2 (4%) | |
| Tension Lipidosis | 1 (2%) | | 1 (2%) | 2 (4%) | |
| Thrombus | 1 (2%) | | | 1 (2%) | |
| Bile Duct, Accumulation, Hyaline Droplet | 2 (4%) | | | | |
| Bile Duct, Cyst | . , | 1 (2%) | | 1 (2%) | |
| Bile Duct, Hyperplasia | | 1 (2%) | | | |
| Bile Duct, Inflammation, Chronic Active | 1 (2%) | | | | |
| Hepatocyte, Cytoplasmic Alteration | ζ, γ | | | 36 (72%) | |
| Hepatocyte, Multinucleated | 8 (16%) | 11 (22%) | 25 (50%) | 42 (84%) | |
| Mesentery | (3) | (1) | (0) | (0) | |
| Fat, Necrosis | 2 (67%) | 1 (100%) | | | |
| Pancreas | (50) | (50) | (49) | (50) | |
| Fibrosis | 1 (2%) | | | | |
| Inflammation, Chronic Active | . , | | | 1 (2%) | |
| Acinus, Atrophy | 2 (4%) | | | | |
| Salivary Glands | (49) | (50) | (50) | (50) | |
| Atrophy | () | | 1 (2%) | , , , , , , , , , , , , , , , , , , , | |
| Infiltration Cellular, Mononuclear Cell | 1 (2%) | | | | |
| Duct, Hyperplasia | | | 1 (2%) | | |
| Stomach, Forestomach | (50) | (50) | (50) | (50) | |
| Ulcer | 1 (2%) | 1 (2%) | () | () | |
| Epithelium, Cyst, Squamous | | 1 (2%) | | | |
| Epithelium, Hyperplasia | 3 (6%) | 1 (2%) | | 1 (2%) | |
| Stomach, Glandular | (50) | (50) | (50) | (50) | |
| Metaplasia, Squamous | 1 (2%) | () | () | () | |
| Mineral | <u> </u> | | | 1 (2%) | |
| Epithelium, Cyst | | 2 (4%) | | | |
| | | N / | | | |

 Experiment Number: 10987 - 02
 P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

 Test Type: CHRONIC
 Dibutyl Phthalate

 Route: DOSED FEED
 CAS Number: 84-74-2

 Species/Strain: MICE/B6C3F1/N
 Discontinue

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|------------------------------------|----------|-----------|----------|-----------|--|
| Epithelium, Cytoplasmic Alteration | | 1 (2%) | 1 (2%) | | |
| Epithelium, Hyperplasia | 1 (2%) | | · · / | | |
| Epithelium, Ulcer | | | | 1 (2%) | |
| Tooth | (6) | (12) | (7) | (9) | |
| Dysplasia | 6 (100%) | 12 (100%) | 7 (100%) | 9 (100%) | |
| Inflammation, Suppurative | | 1 (8%) | | 1 (11%) | |
| Necrosis | | 1 (8%) | | | |
| CARDIOVASCULAR SYSTEM | | | | | |
| Blood Vessel | (50) | (50) | (50) | (49) | |
| Mineral | | | 1 (2%) | | |
| Aorta, Hemorrhage | | | 2 (4%) | | |
| Heart | (50) | (50) | (50) | (50) | |
| Cardiomyopathy | 11 (22%) | 14 (28%) | 8 (16%) | 14 (28%) | |
| Inflammation | 1 (2%) | | | | |
| Mineral | 1 (2%) | | | | |
| Thrombus | | | | 1 (2%) | |
| Valve, Angiectasis | | | | 1 (2%) | |
| ENDOCRINE SYSTEM | | | | | |
| Adrenal Cortex | (50) | (50) | (50) | (50) | |
| Hemorrhage | | | 1 (2%) | | |
| Hypertrophy, Focal | 2 (4%) | 1 (2%) | 6 (12%) | | |
| Bilateral, Hypertrophy, Focal | 1 (2%) | 1 (2%) | | | |
| Subcapsular, Hyperplasia | 22 (44%) | 26 (52%) | 27 (54%) | 20 (40%) | |
| Adrenal Medulla | (50) | (50) | (50) | (50) | |
| Hyperplasia | 1 (2%) | | | | |
| Islets, Pancreatic | (50) | (50) | (49) | (50) | |
| Atrophy | | 1 (2%) | | | |
| Hyperplasia | 11 (22%) | 11 (22%) | 11 (22%) | 7 (14%) | |
| Parathyroid Gland | (40) | (45) | (36) | (40) | |
| Cyst | | | 1 (3%) | | |
| Pituitary Gland | (48) | (49) | (48) | (48) | |

| Experiment Number: 10987 - 02 Test Type: CHRONIC Route: DOSED FEED Species/Strain: MICE/B6C3F1/N | P03: INCIDENCE F | RATES OF NON-NEOP Dibutyl F CAS Numb | Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT | | |
|---|------------------|--|---|-----------|--|
| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
| Thyroid Gland | (50) | (50) | (48) | (50) | |
| Follicle, Cyst | | 2 (4%) | 1 (2%) | 1 (2%) | |
| Follicle, Degeneration | 1 (2%) | | | 1 (2%) | |
| GENERAL BODY SYSTEM | | | , | | |
| None | | | | | |
| GENITAL SYSTEM | | | | | |
| Coagulating Gland | (0) | (1) | (4) | (1) | |
| Bilateral, Atrophy | | 1 (100%) | 3 (75%) | 1 (100%) | |
| Epididymis | (50) | (50) | (50) | (50) | |
| Hypospermia | () | 3 (6%) | | 1 (2%) | |
| Infiltration Cellular, Lymphocyte | | 1 (2%) | | | |
| Inflammation, Chronic | 1 (2%) | () | | 1 (2%) | |
| Sperm Granuloma | (), | 2 (4%) | | 2 (4%) | |
| Bilateral, Hypospermia | 1 (2%) | 1 (2%) | 3 (6%) | 2 (4%) | |
| Bilateral, Duct, Atrophy | (/ | 1 (2%) | 3 (6%) | 1 (2%) | |
| Bilateral, Duct, Exfoliated Germ Cell | 4 (8%) | 7 (14%) | 5 (10%) | 8 (16%) | |
| Duct, Exfoliated Germ Cell | 2 (4%) | 3 (6%) | | 5 (10%) | |
| Preputial Gland | (50) | (50) | (50) | (50) | |
| Cyst | () | 1 (2%) | () | () | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Prostate | (50) | (50) | (50) | (50) | |
| Infiltration Cellular, Lymphocyte | () | () | 1 (2%) | () | |
| Seminal Vesicle | (50) | (50) | (50) | (50) | |
| Inflammation, Chronic | x/ | x / | 1 (2%) | | |
| Bilateral, Atrophy | 1 (2%) | 1 (2%) | 3 (6%) | 1 (2%) | |
| Testis | (50) | (50) | (50) | (50) | |
| Bilateral, Germinal Epithelium, Degeneration | 5 (10%) | 10 (20%) | 6 (12%) | 12 (24%) | |
| Bilateral, Interstitial Cell, Atrophy | 2 (4%) | 1 (2%) | 2 (4%) | 3 (6%) | |
| Germinal Epithelium, Degeneration | 1 (2%) | 5 (10%) | 3 (6%) | 3 (6%) | |
| Interstitial Cell, Hyperplasia, Focal | <u> </u> | 1 (2%) | - (-,-) | - (-,-) | |
| Seminiferous Tubule, Mineral | | 1 (2%) | | | |

Experiment Number: 10987 - 02 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1/N

Route: DOSED FEED

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|---|----------|----------|----------|-----------|--|
| | | | | | |
| HEMATOPOIETIC SYSTEM | | | | | |
| Bone Marrow | (50) | (50) | (49) | (50) | |
| Hypercellularity | 4 (8%) | 3 (6%) | | 3 (6%) | |
| Hypocellularity | 1 (2%) | 1 (2%) | 1 (2%) | 1 (2%) | |
| Pigment | | | 1 (2%) | | |
| Lymph Node | (2) | (2) | (2) | (1) | |
| Mediastinal, Infiltration Cellular, Plasma Cell | | 1 (50%) | | | |
| Renal, Hyperplasia, Lymphocyte | | · | | 1 (100%) | |
| Renal, Infiltration Cellular, Mixed Cell | | | | 1 (100%) | |
| Lymph Node, Mandibular | (49) | (48) | (49) | (46) | |
| Atrophy | | 4 (8%) | 2 (4%) | | |
| Hyperplasia, Lymphoid | 5 (10%) | 2 (4%) | 1 (2%) | 1 (2%) | |
| Infiltration Cellular, Plasma Cell | | 2 (4%) | 1 (2%) | | |
| Lymph Node, Mesenteric | (48) | (48) | (47) | (49) | |
| Angiectasis | 1 (2%) | | | | |
| Extramedullary Hematopoiesis | | 1 (2%) | 2 (4%) | 6 (12%) | |
| Hemorrhage | 1 (2%) | | | 1 (2%) | |
| Hyperplasia, Lymphocyte | 10 (21%) | 4 (8%) | 7 (15%) | 7 (14%) | |
| Infiltration Cellular, Mast Cell | | | | 1 (2%) | |
| Infiltration Cellular, Mixed Cell | 2 (4%) | | | 2 (4%) | |
| Infiltration Cellular, Plasma Cell | | | 1 (2%) | 1 (2%) | |
| Inflammation, Chronic | | 1 (2%) | | | |
| Spleen | (50) | (50) | (50) | (50) | |
| Amyloid | | 1 (2%) | | | |
| Angiectasis | | 1 (2%) | | | |
| Extramedullary Hematopoiesis | 21 (42%) | 21 (42%) | 23 (46%) | 22 (44%) | |
| Hyperplasia, Lymphocyte | 19 (38%) | 18 (36%) | 15 (30%) | 15 (30%) | |
| Pigment | 1 (2%) | 1 (2%) | | | |
| White Pulp, Atrophy | 4 (8%) | 8 (16%) | 7 (14%) | 7 (14%) | |
| Thymus | (45) | (46) | (46) | (46) | |
| Atrophy | 11 (24%) | 18 (39%) | 12 (26%) | 10 (22%) | |
| Cyst | | 3 (7%) | 2 (4%) | 3 (7%) | |
| Hemorrhage | | · · · | 1 (2%) | | |

| Experiment Number: 10987 - 02 Test Type: CHRONIC Route: DOSED FEED Species/Strain: MICE/B6C3F1/N | P03: INCIDENCE F | ATES OF NON-NEOP Dibutyl F CAS Numb | Date Report Requested: 06/04/201 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT | | |
|--|---------------------------------|---|--|------------------------------------|--|
| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
| Hyperplasia, Lymphoid | | | | 1 (2%) | |
| INTEGUMENTARY SYSTEM | | | | | |
| Mammary Gland Skin Edema Hair Follicle, Inflammation, Chronic Active Subcutaneous Tissue, Infiltration Cellular, Mononuclear Cell | (2) (50) 1 (2%) 1 (2%) | (2) (50) 1 (2%) | (1) (50) | (3) (50) | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| Bone Osteopetrosis Intervertebral Disc, Degeneration | (50) | (50) 1 (2%) | (50) | (50) 2 (4%) | |
| Joint, Degeneration Skeletal Muscle | (0) | (1) | 1 (2%) (1) | (0) | |
| NERVOUS SYSTEM | | | | | |
| Brain Bacterium Inflammation, Suppurative Metaplasia, Osseous Neuron, Necrosis | (50) 1 (2%) | (50) | (50) | (50) 1 (2%) 1 (2%) 1 (2%) | |
| Spinal Cord Axon, Degeneration | (0) | (0) | (0) | (1) 1 (100%) | |
| RESPIRATORY SYSTEM | | | | | |
| Lung Extramedullary Hematopoiesis Fibrosis | (50) 1 (2%) | (50) 1 (2%) | (50) | (50) | |

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Experiment Number: 10987 - 02 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1/N

Route: DOSED FEED

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|----------|----------|----------|-----------|--|
| Hemorrhage | 1 (2%) | | | | |
| Infiltration Cellular, Histiocyte | 1 (2%) | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 (2%) | | | 4 (8%) | |
| Inflammation, Granulomatous | | | 1 (2%) | | |
| Inflammation, Chronic Active | | 1 (2%) | | | |
| Mineral | | | 1 (2%) | | |
| Alveolar Epithelium, Hyperplasia | 4 (8%) | 4 (8%) | 4 (8%) | 3 (6%) | |
| Artery, Inflammation, Suppurative | | | 1 (2%) | | |
| Nose | (50) | (50) | (50) | (50) | |
| Eosinophilic Material | 47 (94%) | 45 (90%) | 42 (84%) | 49 (98%) | |
| Inflammation | 2 (4%) | 1 (2%) | 4 (8%) | 3 (6%) | |
| Polyp, Inflammatory | | 1 (2%) | 1 (2%) | | |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | | | 1 (2%) | 1 (2%) | |
| Olfactory Epithelium, Atrophy | 1 (2%) | | | | |
| Olfactory Epithelium, Metaplasia, Respiratory | 5 (10%) | 2 (4%) | 1 (2%) | 4 (8%) | |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 2 (4%) | 1 (2%) | 2 (4%) | | |
| Respiratory Epithelium, Hyperplasia | 17 (34%) | 9 (18%) | 10 (20%) | 18 (36%) | |
| Trachea | (50) | (50) | (50) | (50) | |
| SPECIAL SENSES SYSTEM | | | | | |
| Eye | (50) | (50) | (50) | (50) | |
| Phthisis Bulbi | 1 (2%) | (00) | (00) | 1 (2%) | |
| Harderian Gland | (50) | (50) | (50) | (50) | |
| Hyperplasia | 1 (2%) | 1 (2%) | 1 (2%) | 2 (4%) | |
| Inflammation, Chronic Active | 2 (4%) | | 1 (2%) | _ (, | |
| URINARY SYSTEM | | | | | |
| Kidney | (50) | (50) | (50) | (50) | |
| Cyst | (00) | (00) | 2 (4%) | 1 (2%) | |
| Infarct | 5 (10%) | 7 (14%) | 1 (2%) | 1 (270) | |
| Inflammation, Chronic Active | 0 (1070) | 1 (17/0) | 1 (2%) | | |
| initianination, Chronic Active | | | I (∠%) | | |

| Experiment Number: 10987 - 02 Fest Type: CHRONIC Route: DOSED FEED Species/Strain: MICE/B6C3F1/N | P03: INCIDENCE R | Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT | | | |
|---|------------------|---|----------|-----------|--|
| B6C3F1/N MICE MALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
| Metaplasia, Osseous | 3 (6%) | | | | |
| Mineral | 1 (2%) | 2 (4%) | 6 (12%) | 2 (4%) | |
| Nephropathy, Chronic Progressive | 44 (88%) | 45 (90%) | 42 (84%) | 37 (74%) | |
| Glomerulus, Cyst | | | 2 (4%) | | |
| Interstitium, Infiltration Cellular, Lymphocyte | 1 (2%) | | | | |
| Interstitium, Infiltration Cellular, Mononuclear Cell | | 1 (2%) | | | |
| Papilla, Necrosis | | 1 (2%) | | | |
| Pelvis, Dilation | | | 3 (6%) | | |
| Pelvis, Inflammation, Suppurative | | 1 (2%) | 1 (2%) | | |
| Renal Tubule, Accumulation, Hyaline Droplet | | 1 (2%) | | | |
| Renal Tubule, Cyst | 4 (8%) | 5 (10%) | 1 (2%) | | |
| Renal Tubule, Hyperplasia | 1 (2%) | | | | |
| Renal Tubule, Pigment | | | 1 (2%) | | |
| Urinary Bladder | (50) | (50) | (50) | (50) | |
| Calculus Gross Observation | | | 1 (2%) | | |
| Infiltration Cellular, Mononuclear Cell | | | | 1 (2%) | |
| Inflammation, Chronic Active | | | 1 (2%) | | |

*** END OF MALE ***

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|---------|----------|----------|-----------|--|
| Disposition Summary | | | | | |
| Animals Initially In Study | 50 | 50 | 50 | 50 | |
| Early Deaths | | | | | |
| Moribund Sacrifice | 1 | 1 | | | |
| Natural Death | 7 | 7 | 6 | 3 | |
| Survivors | | | | | |
| Terminal Sacrifice | 42 | 42 | 44 | 47 | |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 | |
| ALIMENTARY SYSTEM | | | | | |
| Esophagus | (49) | (50) | (49) | (50) | |
| Gallbladder | (50) | (50) | (49) | (48) | |
| Intestine Large, Cecum | (50) | (50) | (47) | (48) | |
| Hemorrhage | | | 1 (2%) | | |
| Necrosis | | | 1 (2%) | | |
| Lymphoid Tissue, Hyperplasia | 1 (2%) | | | | |
| Intestine Large, Colon | (50) | (50) | (47) | (48) | |
| Intestine Large, Rectum | (50) | (50) | (47) | (49) | |
| Intestine Small, Duodenum | (50) | (50) | (47) | (48) | |
| Intestine Small, Ileum | (50) | (50) | (47) | (48) | |
| Inflammation, Suppurative | | | 1 (2%) | | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Epithelium, Hyperplasia | 2 (4%) | | 1 (2%) | | |
| Goblet Cell, Hyperplasia | 1 (2%) | | | | |
| Intestine Small, Jejunum | (50) | (50) | (47) | (48) | |
| Hyperplasia, Lymphoid | | | 1 (2%) | | |
| Inflammation, Suppurative | | | 1 (2%) | | |
| Inflammation, Chronic | | | 1 (2%) | | |
| Inflammation, Chronic Active | | 1 (2%) | 1 (2%) | | |
| Epithelium, Hyperplasia | | 2 (4%) | | | |
| Peyer's Patch, Hyperplasia, Lymphocyte | 1 (2%) | 2 (4%) | 1 (2%) | 1 (2%) | |
| Liver | (50) | (50) | (49) | (49) | |
| Angiectasis | | | 1 (2%) | | |
| Basophilic Focus | 6 (12%) | 3 (6%) | 3 (6%) | 1 (2%) | |

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|----------|----------|----------|-----------|--|
| Clear Cell Focus | | 1 (2%) | | | |
| Eosinophilic Focus | 1 (2%) | 2 (4%) | | 1 (2%) | |
| Extramedullary Hematopoiesis | 2 (4%) | 1 (2%) | | 1 (2%) | |
| Infiltration Cellular, Mononuclear Cell | 2 (4%) | 3 (6%) | 1 (2%) | | |
| Inflammation, Focal | 2 (4%) | 2 (4%) | 2 (4%) | 5 (10%) | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Mixed Cell Focus | 2 (4%) | | 1 (2%) | 1 (2%) | |
| Necrosis | 4 (8%) | 3 (6%) | 2 (4%) | | |
| Tension Lipidosis | 3 (6%) | 5 (10%) | | | |
| Bile Duct, Accumulation, Hyaline Droplet | | | | 1 (2%) | |
| Endothelium, Hyperplasia | 1 (2%) | | | | |
| Hepatocyte, Cytoplasmic Alteration | | | | 48 (98%) | |
| Mesentery | (1) | (2) | (2) | (2) | |
| Hemorrhage | | | | 1 (50%) | |
| Fat, Necrosis | 1 (100%) | 1 (50%) | 2 (100%) | | |
| Pancreas | (50) | (49) | (48) | (49) | |
| Infiltration Cellular, Lymphocyte | 1 (2%) | | | | |
| Duct, Cyst | | | 2 (4%) | 1 (2%) | |
| Salivary Glands | (50) | (50) | (49) | (50) | |
| Stomach, Forestomach | (50) | (50) | (49) | (49) | |
| Ulcer | | 1 (2%) | | | |
| Epithelium, Hyperplasia | 2 (4%) | | 1 (2%) | | |
| Stomach, Glandular | (50) | (50) | (49) | (49) | |
| Cyst | 1 (2%) | | 1 (2%) | | |
| Inflammation, Chronic Active | | 1 (2%) | | | |
| Metaplasia, Squamous | | 1 (2%) | | | |
| Mineral | 1 (2%) | | | | |
| Epithelium, Cyst | , , , | 1 (2%) | | 1 (2%) | |
| Epithelium, Cytoplasmic Alteration | | 1 (2%) | | · · | |
| Epithelium, Hyperplasia | 1 (2%) | 1 (2%) | | | |
| Tooth | (2) | (1) | (0) | (0) | |
| Dysplasia | 1 (50%) | | · · | | |
| Inflammation, Chronic Active | 1 (50%) | | | | |
| Necrosis | 1 (50%) | 1 (100%) | | | |

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|---|----------|----------|----------|---------------------------------------|--|
| CARDIOVASCULAR SYSTEM | | | | | |
| Blood Vessel | (49) | (50) | (49) | (49) | |
| Inflammation, Chronic Active | (10) | 2 (4%) | 1 (2%) | 4 (8%) | |
| Mineral | 2 (4%) | (/ | | () | |
| Heart | (50) | (50) | (49) | (50) | |
| Cardiomyopathy | 19 (38%) | 7 (14%) | 11 (22%) | 12 (24%) | |
| Infiltration Cellular, Mixed Cell | - () | (| | 1 (2%) | |
| Thrombus | | | 1 (2%) | | |
| Endocardium, Hyperplasia | | | 1 (2%) | | |
| Endothelium, Hyperplasia | 1 (2%) | | · / | | |
| Valve, Bacterium | 2 (4%) | | | | |
| Valve, Inflammation, Chronic | 1 (2%) | | | | |
| Valve, Inflammation, Chronic Active | 1 (2%) | | | | |
| ENDOCRINE SYSTEM | | | | · · · · · · · · · · · · · · · · · · · | |
| Adrenal Cortex | (50) | (50) | (49) | (49) | |
| Angiectasis | 1 (2%) | | | | |
| Extramedullary Hematopoiesis | | 1 (2%) | | 1 (2%) | |
| Hyperplasia, Focal | | · · · | | 1 (2%) | |
| Subcapsular, Hyperplasia | 44 (88%) | 38 (76%) | 41 (84%) | 49 (100%) | |
| Adrenal Medulla | (49) | (50) | (49) | (49) | |
| Hyperplasia | | | 1 (2%) | 1 (2%) | |
| Islets, Pancreatic | (50) | (50) | (48) | (49) | |
| Hyperplasia | 2 (4%) | 1 (2%) | . , | | |
| Parathyroid Gland | (43) | (47) | (36) | (33) | |
| Cyst | 1 (2%) | . , | . , | | |
| Pituitary Gland | (49) | (49) | (48) | (47) | |
| Angiectasis | | 1 (2%) | 1 (2%) | | |
| Pars Distalis, Hyperplasia | 2 (4%) | · · · | 2 (4%) | 1 (2%) | |
| Pars Intermedia, Hyperplasia | · · · | | 2 (4%) | | |
| Thyroid Gland | (50) | (50) | (48) | (49) | |
| Infiltration Cellular, Mononuclear Cell | | 1 (2%) | . , | · · | |
| Follicle, Cyst | 2 (4%) | 4 (8%) | 3 (6%) | | |

| Experiment Number: 10987 - 02 Test Type: CHRONIC Route: DOSED FEED Species/Strain: MICE/B6C3F1/N | P03: INCIDENCE R | | LASTIC LESIONS BY Phthalate per: 84-74-2 | ANATOMIC SITE(a) | Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT |
|---|------------------------|--------------|--|------------------|---|
| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
| GENERAL BODY SYSTEM | | | | | |
| None | | | | | |
| GENITAL SYSTEM | | - | | | |
| Clitoral Gland Ovary Angiectasis | (50) (48) 2 (4%) | (49) (50) | (49) (48) | (49) (50) | |
| Anglectasis | 24 (50%) | 29 (58%) | 20 (42%) | 25 (50%) | |
| Cyst | 6 (13%) | 10 (20%) | 7 (15%) | 4 (8%) | |
| Inflammation, Suppurative | 1 (2%) | 10 (2070) | 1 (1070) | 1 (070) | |
| Thrombus | . (270) | | 1 (2%) | | |
| Follicle, Cyst | 1 (2%) | | . (= /0) | 1 (2%) | |
| Granulosa Cell, Hyperplasia | 1 (2%) | 1 (2%) | | (/ | |
| Interstitial Cell, Hyperplasia | | 1 (2%) | | 2 (4%) | |
| Oviduct | (0) | (0) | (1) | (0) | |
| Mineral | | | 1 (100%) | | |
| Uterus | (50) | (50) | (49) | (50) | |
| Angiectasis | 1 (2%) | | 1 (2%) | 1 (2%) | |
| Fibrosis | | | 1 (2%) | | |
| Inflammation, Suppurative | | | 1 (2%) | | |
| Inflammation, Chronic Active | | | | 1 (2%) | |
| Metaplasia, Squamous | | | 1 (2%) | | |
| Thrombus | , | | | 1 (2%) | |
| Endometrium, Degeneration, Mucoid | 1 (2%) | | | | |
| Endometrium, Hyperplasia, Cystic | 38 (76%) | 29 (58%) | 38 (78%) | 36 (72%) | |
| Myometrium, Hyperplasia | (4) | | | 1 (2%) | |
| Vagina | (1) | (0) | (0) | (0) | |
| HEMATOPOIETIC SYSTEM | | | | | |
| Bone Marrow | (50) | (50) | (50) | (50) | |

Experiment Number: 10987 - 02 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1/N

Route: DOSED FEED

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|---|----------|----------|----------|-----------|--|
| Angiectasis | 1 (2%) | | | | |
| Hypercellularity | 2 (4%) | 3 (6%) | 2 (4%) | 4 (8%) | |
| Hypercellularity, Granulocytic | 1 (2%) | · · · | | | |
| Hypocellularity | 2 (4%) | | 1 (2%) | 3 (6%) | |
| Myelofibrosis | | | | 1 (2%) | |
| Lymph Node | (4) | (4) | (3) | (4) | |
| Lumbar, Hyperplasia, Lymphoid | | | | 1 (25%) | |
| Mediastinal, Infiltration Cellular, Plasma Cell | | 1 (25%) | | | |
| Lymph Node, Mandibular | (49) | (50) | (49) | (50) | |
| Atrophy | | 3 (6%) | 2 (4%) | 1 (2%) | |
| Hyperplasia, Lymphoid | 5 (10%) | 2 (4%) | 3 (6%) | 6 (12%) | |
| Infiltration Cellular, Histiocyte | | | 1 (2%) | | |
| Lymph Node, Mesenteric | (46) | (48) | (47) | (47) | |
| Angiectasis | | 1 (2%) | | | |
| Atrophy | | 3 (6%) | 2 (4%) | 2 (4%) | |
| Dilation | | | | 1 (2%) | |
| Extramedullary Hematopoiesis | | 3 (6%) | | 2 (4%) | |
| Hyperplasia, Lymphocyte | 15 (33%) | 9 (19%) | 12 (26%) | 9 (19%) | |
| Infiltration Cellular, Eosinophil, Plasma Cell | | | | 1 (2%) | |
| Infiltration Cellular, Histiocyte | | 1 (2%) | 1 (2%) | | |
| Infiltration Cellular, Plasma Cell | 2 (4%) | 4 (8%) | 4 (9%) | 3 (6%) | |
| Spleen | (50) | (50) | (49) | (49) | |
| Angiectasis | 1 (2%) | | | 1 (2%) | |
| Extramedullary Hematopoiesis | 25 (50%) | 35 (70%) | 25 (51%) | 21 (43%) | |
| Hyperplasia, Lymphocyte | 23 (46%) | 24 (48%) | 22 (45%) | 21 (43%) | |
| Infiltration Cellular, Histiocyte | | | | 1 (2%) | |
| Pigment | 6 (12%) | 7 (14%) | 12 (24%) | 12 (24%) | |
| Thrombus | | | | 1 (2%) | |
| Lymphoid Follicle, Atrophy | 1 (2%) | | | | |
| Red Pulp, Hyperplasia | | 1 (2%) | 1 (2%) | | |
| White Pulp, Atrophy | 4 (8%) | 5 (10%) | 1 (2%) | 2 (4%) | |
| Thymus | (45) | (48) | (47) | (47) | |
| Atrophy | 3 (7%) | 6 (13%) | 6 (13%) | 1 (2%) | |
| Cyst | | 1 (2%) | 3 (6%) | | |
| Hyperplasia, Lymphocyte | | | 1 (2%) | | |
| Hyperplasia, Lymphoid | 4 (9%) | 5 (10%) | 2 (4%) | 1 (2%) | |

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|---|----------|----------|----------|-----------|--|
| INTEGUMENTARY SYSTEM | | | | | |
| Mammary Gland | (50) | (49) | (49) | (50) | |
| Skin | (50) | (49) | (49) | (50) | |
| Hair Follicle, Inflammation | 1 (2%) | (00) | (+3) | (55) | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| Bone | (50) | (50) | (50) | (50) | |
| Fibro-Osseous Lesion | 11 (22%) | 11 (22%) | 8 (16%) | 6 (12%) | |
| Fibrosis | | 1 (2%) | . , | | |
| Joint, Degeneration | 1 (2%) | | | | |
| Skeletal Muscle | (2) | (0) | (0) | (1) | |
| NERVOUS SYSTEM | | | <u>.</u> | | |
| Brain | (50) | (50) | (49) | (50) | |
| Gliosis | | | 1 (2%) | 1 (2%) | |
| Hemorrhage | | 1 (2%) | | | |
| Infiltration Cellular, Lymphocyte | 1 (2%) | | | | |
| RESPIRATORY SYSTEM | | | | | |
| Lung | (50) | (50) | (49) | (50) | |
| Hyperplasia, Lymphoid | 2 (4%) | | 1 (2%) | | |
| Infiltration Cellular, Histiocyte | | | 1 (2%) | | |
| Infiltration Cellular, Lymphocyte | 2 (4%) | | 1 (2%) | 1 (2%) | |
| Infiltration Cellular, Mononuclear Cell | | | 2 (4%) | | |
| Inflammation, Granulomatous | 1 (2%) | | | 1 (2%) | |
| Inflammation, Chronic Active | | 1 (2%) | 1 (2%) | | |
| Mineral | 1 (2%) | | | | |
| Alveolar Epithelium, Hyperplasia | 2 (4%) | 3 (6%) | 5 (10%) | 1 (2%) | |

Experiment Number: 10987 - 02 Test Type: CHRONIC Route: DOSED FEED

Species/Strain: MICE/B6C3F1/N

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm | |
|--|-----------|-----------|-----------|-----------|--|
| Artery, Inflammation, Suppurative | 1 (2%) | | | | |
| Perivascular, Infiltration Cellular, Mononuclear Cell | 2 (4%) | | 1 (2%) | | |
| Nose | (50) | (50) | (50) | (50) | |
| Eosinophilic Material | 1 (2%) | 1 (2%) | 1 (2%) | 3 (6%) | |
| Inflammation, Suppurative | | 1 (2%) | 2 (4%) | | |
| Glands, Inflammation, Suppurative | | | | 1 (2%) | |
| Olfactory Epithelium, Metaplasia, Respiratory | 4 (8%) | 1 (2%) | 1 (2%) | 2 (4%) | |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | | 1 (2%) | 1 (2%) | 1 (2%) | |
| Respiratory Epithelium, Cyst | 1 (2%) | | | 2 (4%) | |
| Respiratory Epithelium, Hyperplasia | | | 3 (6%) | 2 (4%) | |
| Respiratory Epithelium, Inflammation, Suppurative | | | | 1 (2%) | |
| Trachea | (50) | (50) | (49) | (50) | |
| SPECIAL SENSES SYSTEM | | | - | | |
| Eye | (50) | (50) | (49) | (50) | |
| Inflammation, Chronic Active | 1 (2%) | | | | |
| Phthisis Bulbi | 1 (2%) | 2 (4%) | | | |
| Cornea, Inflammation, Chronic Active | | 1 (2%) | | | |
| Lens, Cataract | 1 (2%) | 2 (4%) | | | |
| Retina, Dysplasia | | 1 (2%) | | | |
| Harderian Gland | (50) | (50) | (49) | (50) | |
| Fibrosis | | | 1 (2%) | | |
| Hyperplasia | 3 (6%) | 1 (2%) | 1 (2%) | 2 (4%) | |
| URINARY SYSTEM | | | | | |
| Kidney | (50) | (50) | (49) | (49) | |
| Infarct | 6 (12%) | 1 (2%) | 1 (2%) | () | |
| Metaplasia, Osseous | 2 (4%) | 1 (2%) | 3 (6%) | | |
| Mineral | 1 (2%) | 1 (270) | 0 (070) | | |
| Nephropathy, Chronic Progressive | 33 (66%) | 27 (54%) | 36 (73%) | 32 (65%) | |
| reprilopatily, Onionic Frogressive | 55 (00 %) | 21 (04/0) | 50 (1576) | 52 (0576) | |

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

Dibutyl Phthalate

CAS Number: 84-74-2

Date Report Requested: 06/04/2018 Time Report Requested: 09:07:59 First Dose M/F: 08/17/10 / 08/16/10 Lab: BAT

| B6C3F1/N MICE FEMALE | 0 ppm | 1000 ppm | 3000 ppm | 10000 ppm |
|---|---------|----------|----------|-----------|
| Thrombus | | | 1 (2%) | |
| Endothelium, Hyperplasia | 1 (2%) | | | |
| Glomerulus, Amyloid | 1 (2%) | | | |
| Glomerulus, Inflammation, Chronic Active | | | 1 (2%) | |
| Interstitium, Infiltration Cellular, Lymphocyte | | 1 (2%) | | |
| Pelvis, Dilation | 2 (4%) | 1 (2%) | | |
| Renal Tubule, Accumulation, Hyaline Droplet | 1 (2%) | 3 (6%) | 2 (4%) | 1 (2%) |
| Renal Tubule, Cyst | | | | 1 (2%) |
| Renal Tubule, Hyperplasia | | | | 47 (96%) |
| Urinary Bladder | (48) | (50) | (49) | (50) |
| Infiltration Cellular, Lymphocyte | 5 (10%) | | 2 (4%) | 1 (2%) |
| Infiltration Cellular, Mononuclear Cell | | 1 (2%) | | |

*** END OF REPORT ***