Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Lab: BAT

Final 2_HSD Rats

NTP Study Number: C10188B

Lock Date: 04/01/2015

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Disposition Summary					
Animals Initially In Study	50	50	50	50	50
Early Deaths					
Moribund Sacrifice	4	8	2	8	4
Natural Death	14	8	9	7	4
Survivors					
Natural Death		1			
Terminal Sacrifice	32	33	39	35	42
Animals Examined Microscopically	50	50	50	50	50
ALIMENTARY SYSTEM					
Esophagus	(50)	(50)	(49)	(50)	(50)
Foreign Body		1 (2%)			
Inflammation, Chronic Active		1 (2%)			
Intestine Large, Cecum	(49)	(50)	(50)	(50)	(50)
Erosion			1 (2%)		
Inflammation, Acute	1 (2%)				
Inflammation, Chronic Active			1 (2%)		
Mineral			1 (2%)		
Polyarteritis Nodosa	5 (10%)	1 (2%)			
Intestine Large, Colon	(49)	(50)	(50)	(50)	(50)
Hyperplasia, Lymphocyte	2 (4%)				
Inflammation, Chronic Active			1 (2%)		
Parasite Metazoan	1 (2%)	1 (2%)	3 (6%)		1 (2%)
Polyarteritis Nodosa	1 (2%)	1 (2%)			1 (2%)
Serosa, Hemorrhage			1 (2%)		
Intestine Large, Rectum	(50)	(50)	(50)	(50)	(50)
Parasite Metazoan	8 (16%)	11 (22%)	8 (16%)	6 (12%)	16 (32%)
Polyarteritis Nodosa	2 (4%)	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(48)	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	1 (2%)				
Intestine Small, Jejunum	(49)	(50)	(50)	(50)	(50)
Peyer's Patch, Hyperplasia	1 (2%)				

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larlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Liver	(50)	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	1 (2%)	, ,	, ,	. ,
Basophilic Focus	6 (12%)	1 (2%)	6 (12%)	4 (8%)	3 (6%)
Cholangiofibrosis				1 (2%)	
Clear Cell Focus	29 (58%)	31 (62%)	33 (66%)	35 (70%)	39 (78%)
Degeneration, Cystic	2 (4%)	1 (2%)	, ,	4 (8%)	1 (2%)
Eosinophilic Focus	1 (2%)	, ,	4 (8%)	2 (4%)	24 (48%)
Extramedullary Hematopoiesis	1 (2%)	1 (2%)	, ,	, ,	, ,
Fibrosis	1 (2%)	, ,			
Hepatodiaphragmatic Nodule	` '			1 (2%)	
Infiltration Cellular, Lymphoid				1 (2%)	
Inflammation, Focal	2 (4%)			,	
Mixed Cell Focus	1 (2%)	1 (2%)	1 (2%)	2 (4%)	1 (2%)
Necrosis	,	2 (4%)	4 (8%)	7 (14%)	8 (16%)
Pigment		,	7 (14%)	45 (90%)	50 (100%)
Polyarteritis Nodosa	1 (2%)	1 (2%)	,	,	,
Bile Duct, Cyst	2 (4%)	,	1 (2%)		
Bile Duct, Dilation	, ,	2 (4%)	1 (2%)	2 (4%)	
Bile Duct, Hyperplasia	9 (18%)	14 (28%)	11 (22%)	8 (16%)	11 (22%)
Bile Duct, Inflammation, Chronic Active	,	1 (2%)	,	,	,
Hepatocyte, Cytoplasmic Alteration		1 (2%)		38 (76%)	49 (98%)
Hepatocyte, Fatty Change, Diffuse		1 (2%)		,	,
Hepatocyte, Hypertrophy		,		2 (4%)	6 (12%)
Mesentery	(2)	(5)	(1)	(3)	(4)
Hemorrhage	()	()	1 (100%)	1 (33%)	()
Polyarteritis Nodosa	2 (100%)	3 (60%)	1 (100%)	1 (33%)	1 (25%)
Arteriole, Mineral	, ,	,	1 (100%)	, ,	,
Fat, Necrosis		1 (20%)	(/		1 (25%)
Oral Mucosa	(0)	(1)	(0)	(1)	(1)
Gingival, Cyst	` '	` '	()	()	1 (100%)
Pancreas	(49)	(50)	(50)	(50)	(50)
Basophilic Focus	1 (2%)	ν /	(/	()	(,
Cholangiofibrosis	(/	1 (2%)			
Edema		1 (2%)			
Fatty Infiltration		1 (2%)			
Fibrosis		· · · · /			1 (2%)

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

Test Type: CHRONIC
Route: DOSED FEED
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P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Infiltration Cellular, Lymphoid				1 (2%)		
Inflammation, Chronic Active	1 (2%)	1 (2%)			1 (2%)	
Polyarteritis Nodosa	6 (12%)	4 (8%)	7 (14%)	2 (4%)	2 (4%)	
Acinus, Atrophy	3 (6%)	3 (6%)	4 (8%)	2 (4%)	5 (10%)	
Acinus, Hyperplasia	7 (14%)	8 (16%)	9 (18%)	24 (48%)	26 (52%)	
Bile Duct, Dilation		1 (2%)			2 (4%)	
Duct, Inflammation, Chronic Active	1 (2%)					
Salivary Glands	(50)	(50)	(50)	(50)	(50)	
Fibrosis	, ,	, ,	, ,	, ,	1 (2%)	
Inflammation, Chronic Active					1 (2%)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	(50)	
Inflammation, Granulomatous	, ,	, ,	, ,	, ,	1 (2%)	
Inflammation, Chronic				1 (2%)	,	
Inflammation, Chronic Active	1 (2%)	1 (2%)		,	2 (4%)	
Mineral	1 (2%)	,		1 (2%)	,	
Polyarteritis Nodosa	(,	1 (2%)	
Ulcer		1 (2%)			,	
Epithelium, Dysplasia		,		1 (2%)		
Epithelium, Hyperplasia	3 (6%)	3 (6%)	1 (2%)	1 (2%)	3 (6%)	
Stomach, Glandular	(50)	(50)	(50)	(50)	(50)	
Cyst, Squamous	1 (2%)	,	,	,	,	
Inflammation, Acute	,			1 (2%)		
Inflammation, Chronic Active		1 (2%)		,		
Mineral	3 (6%)	1 (2%)	1 (2%)	3 (6%)		
Polyarteritis Nodosa	(1 (2%)	,	,		
Thrombus		(/		1 (2%)		
Glands, Amyloid			1 (2%)	()		
Tooth	(0)	(1)	(0)	(0)	(0)	
Inflammation, Suppurative	(-)	1 (100%)	(-/	(-)	(-7	
CARDIOVASCULAR SYSTEM						
Blood Vessel	(50)	(50)	(50)	(50)	(50)	
Aneurysm	(00)	1 (2%)	(00)	(00)	1 (2%)	
Infiltration Cellular, Histiocyte		1 (2%)			1 (270)	

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Mineral	1 (2%)					
Aorta, Mineral	2 (4%)	1 (2%)	1 (2%)	2 (4%)	5 (10%)	
Aorta, Polyarteritis Nodosa		1 (2%)				
Pulmonary Artery, Mineral				1 (2%)		
Pulmonary Vein, Mineral				1 (2%)	1 (2%)	
Heart	(50)	(50)	(50)	(50)	(50)	
Angiectasis	, ,	, ,	1 (2%)		,	
Cardiomyopathy	42 (84%)	41 (82%)	47 (94%)	37 (74%)	30 (60%)	
Inflammation, Acute	,	,	,	1 (2%)	,	
Mineral				1 (2%)		
Polyarteritis Nodosa	2 (4%)			,		
Thrombus	,			1 (2%)		
Artery, Mineral				1 (2%)		
Artery, Polyarteritis Nodosa				1 (2%)		
Myocardium, Necrosis				1 (2%)		
Valve, Degeneration				(-7-7)	1 (2%)	
Valve, Fibrosis	2 (4%)			1 (2%)	9 (18%)	
Valve, Thrombus	= (:/3)			2 (4%)	6 (12%)	
Vein, Mineral				1 (2%)	S (1273)	
ENDOCRINE SYSTEM						
Adrenal Cortex	(50)	(49)	(50)	(50)	(50)	
Atypia Cellular	1 (2%)	,	,	,	,	
Degeneration, Cystic	,		1 (2%)		2 (4%)	
Hyperplasia	5 (10%)	4 (8%)	10 (20%)	4 (8%)	3 (6%)	
Hypertrophy, Focal	3 (6%)	6 (12%)	10 (20%)	6 (12%)	5 (10%)	
Mineral	1 (2%)	- (- ()	- ()	- ()	
Necrosis	1 (2%)		1 (2%)			
Pigment	- (=)		1 (2%)			
Thrombus		1 (2%)	- (-,-)			
Bilateral, Hypertrophy, Focal		. (=/0)		3 (6%)		
Adrenal Medulla	(50)	(50)	(50)	(50)	(50)	
Hyperplasia, Focal	7 (14%)	9 (18%)	8 (16%)	4 (8%)	2 (4%)	
Bilateral, Hyperplasia, Focal	. (11/0)	1 (2%)	3 (1375)	. (0,0)	2 (. / 0)	

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

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Islets, Pancreatic	(49)	(50)	(50)	(50)	(50)
Atrophy				1 (2%)	
Hyperplasia	4 (8%)		1 (2%)	6 (12%)	2 (4%)
Pigment	1 (2%)			1 (2%)	
Parathyroid Gland	(43)	(43)	(45)	(50)	(40)
Hyperplasia, Focal		2 (5%)	1 (2%)		
Hyperplasia, Diffuse	5 (12%)		2 (4%)		
Bilateral, Hyperplasia, Diffuse	2 (5%)			1 (2%)	
Pituitary Gland	(50)	(50)	(50)	(50)	(50)
Cyst	` '		. ,	. ,	1 (2%)
Pigment, Cholesterol	1 (2%)				
Pars Distalis, Hyperplasia	28 (56%)	23 (46%)	26 (52%)	24 (48%)	23 (46%)
Pars Distalis, Hypertrophy	8 (16%)	10 (20%)	11 (22%)	14 (28%)	37 (74%)
Pars Distalis, Necrosis	, ,	•	. ,	1 (2%)	
Pars Intermedia, Hyperplasia		1 (2%)	4 (8%)	1 (2%)	
Thyroid Gland	(50)	(50)	(50)	(50)	(50)
Inflammation, Acute	, ,	, ,	, ,	1 (2%)	` ,
Inflammation, Chronic			1 (2%)	, ,	
C-cell, Hyperplasia	10 (20%)	8 (16%)	4 (8%)	6 (12%)	11 (22%)
Follicle, Cyst	1 (2%)	• •	. ,	• •	
Follicular Cell, Hyperplasia	, ,	1 (2%)	1 (2%)		
GENERAL BODY SYSTEM					.
Peritoneum	(1)	(0)	(0)	(0)	(0)
Tissue NOS	(0)	(0)	(1)	(0)	(0)
GENITAL SYSTEM					
Epididymis	(50)	(50)	(50)	(50)	(50)
Hypospermia	(00)	1 (2%)	(00)	(00)	(00)
Necrosis		1 (2%)			
Polyarteritis Nodosa	1 (2%)	1 (2%)			
Bilateral, Hypospermia	4 (8%)	3 (6%)	4 (8%)	3 (6%)	43 (86%)
Bilateral, Inflammation, Suppurative	1 (2%)	J (070)	+ (070)	3 (070)	40 (0070)
Phatoral, Illiammation, Supporative	1 (2/0)				

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Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate **CAS Number:** 117-81-7

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Bilateral, Inflammation, Chronic	1 (2%)				
Bilateral, Inflammation, Chronic Active			1 (2%)		1 (2%)
Bilateral, Polyarteritis Nodosa	1 (2%)	1 (2%)			1 (2%)
Bilateral, Duct, Exfoliated Germ Cell	2 (4%)	3 (6%)	4 (8%)	4 (8%)	36 (72%)
Penis	(0)	(0)	(1)	(0)	(0)
Prolapse			1 (100%)		
Ulcer			1 (100%)		
Preputial Gland	(49)	(50)	(50)	(50)	(50)
Inflammation, Chronic					1 (2%)
Inflammation, Chronic Active	1 (2%)	1 (2%)	1 (2%)		1 (2%)
Metaplasia, Squamous	1 (2%)				1 (2%)
Mineral	1 (2%)				• •
Duct, Hyperplasia, Squamous	, ,		1 (2%)	1 (2%)	1 (2%)
Prostate	(50)	(50)	(50)	(50)	(50)
Edema	, ,	1 (2%)	, ,	, ,	, ,
Hyperplasia	1 (2%)	, ,			
Inflammation, Suppurative	1 (2%)				
Inflammation, Chronic Active				1 (2%)	
Polyarteritis Nodosa		1 (2%)			1 (2%)
Dorsal, Epithelium, Lateral, Hyperplasia	1 (2%)				• •
Dorsal, Lateral, Inflammation, Granulomatous			1 (2%)		1 (2%)
Dorsal, Lateral, Inflammation, Acute	1 (2%)				• •
Dorsal, Lateral, Inflammation, Chronic	1 (2%)				
Dorsal, Lateral, Inflammation, Chronic Active	1 (2%)	2 (4%)	3 (6%)	2 (4%)	2 (4%)
Epithelium, Ventral, Hyperplasia	3 (6%)	4 (8%)	5 (10%)	1 (2%)	5 (10%)
Ventral, Inflammation, Acute			1 (2%)		
Ventral, Inflammation, Chronic	1 (2%)		` ,		
Ventral, Inflammation, Chronic Active		2 (4%)			
Seminal Vesicle	(50)	(50)	(50)	(50)	(50)
Hyperplasia	, ,	1 (2%)	, ,	, ,	, ,
Infiltration Cellular, Lymphoid		. ,		1 (2%)	
Inflammation, Suppurative	1 (2%)			, ,	
Inflammation, Chronic Active	, ,			2 (4%)	
Mineral				1 (2%)	
Polyarteritis Nodosa		1 (2%)		, ,	
Testis	(50)	(50)	(50)	(50)	(50)

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

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

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larlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Edema	5 (10%)	8 (16%)	7 (14%)	10 (20%)	6 (12%)	
Granuloma Sperm	1 (2%)	, ,	1 (2%)	` ,	, ,	
Polyarteritis Nodosa	1 (2%)	1 (2%)	1 (2%)			
Bilateral, Edema	22 (44%)	15 (30%)	22 (44%)	14 (28%)	39 (78%)	
Bilateral, Polyarteritis Nodosa	24 (48%)	20 (40%)	14 (28%)	4 (8%)	5 (10%)	
Bilateral, Germinal Epithelium, Degeneration	29 (58%)	18 (36%)	19 (38%)	19 (38%)	48 (96%)	
Bilateral, Interstitial Cell, Hyperplasia					1 (2%)	
Germinal Epithelium, Degeneration	2 (4%)	7 (14%)	2 (4%)	3 (6%)	2 (4%)	
Interstitial Cell, Hyperplasia	1 (2%)	1 (2%)		4 (8%)	3 (6%)	
HEMATOPOIETIC SYSTEM						
Bone Marrow	(50)	(50)	(50)	(50)	(50)	
Congestion	. ,	1 (2%)	1 (2%)	1 (2%)	2 (4%)	
Hypercellularity	18 (36%)	22 (44%)	30 (60%)	25 (50%)	34 (68%)	
Myelofibrosis				1 (2%)		
Lymph Node	(1)	(2)	(2)	(4)	(0)	
Lumbar, Hyperplasia, Lymphocyte	. ,	. ,	1 (50%)	, ,	. ,	
Mediastinal, Hemorrhage				1 (25%)		
Renal, Dilation			1 (50%)	, ,		
Renal, Inflammation, Chronic			1 (50%)			
Renal, Pigment			1 (50%)			
Lymph Node, Mandibular	(49)	(50)	(50)	(50)	(50)	
Atrophy	1 (2%)	1 (2%)	. ,	. ,		
Dilation	3 (6%)	, ,			1 (2%)	
Hyperplasia, Lymphocyte	, ,			1 (2%)	• •	
Infiltration Cellular, Plasma Cell	3 (6%)	1 (2%)	1 (2%)	, ,		
Inflammation, Chronic	1 (2%)	, ,	, ,			
Inflammation, Chronic Active	, ,			1 (2%)		
Necrosis	1 (2%)			, ,		
Lymph Node, Mesenteric	(49)	(50)	(50)	(50)	(50)	
Atrophy	1 (2%)	1 (2%)	` '	, ,	,	
Dilation	2 (4%)	, ,				
Fibrosis	·/	1 (2%)				
Hyperplasia, Lymphocyte	1 (2%)	1 (2%)			1 (2%)	

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

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larlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Infiltration Cellular, Plasma Cell	2 (4%)				
Inflammation, Acute	1 (2%)				
Spleen	(50)	(50)	(50)	(50)	(50)
Accessory Spleen				1 (2%)	
Extramedullary Hematopoiesis	45 (90%)	45 (90%)	44 (88%)	45 (90%)	44 (88%)
Fibrosis				1 (2%)	
Hemorrhage				2 (4%)	
Infiltration Cellular, Lipocyte			1 (2%)		
Necrosis			1 (2%)		
Pigment	45 (90%)	44 (88%)	47 (94%)	42 (84%)	43 (86%)
White Pulp, Atrophy	1 (2%)	7 (14%)	4 (8%)	3 (6%)	1 (2%)
White Pulp, Hyperplasia	1 (2%)	• •	. ,	. ,	
Thymus	(48)	(47)	(49)	(50)	(46)
Atrophy	41 (85%)	43 (91%)	49 (100%)	48 (96%)	44 (96%)
Ectopic Parathyroid Gland	1 (2%)	, ,	, ,	, ,	1 (2%)
Hyperplasia, Lymphocyte	1 (2%)	1 (2%)			, ,
Infiltration Cellular, Lipocyte	1 (2%)				
Polyarteritis Nodosa	1 (2%)	1 (2%)			
Epithelial Cell, Hyperplasia	, ,	1 (2%)			
NTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(49)	(50)	(50)
Fibrosis			1 (2%)		
Inflammation, Chronic Active			1 (2%)		
Skin	(49)	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	5 (10%)		1 (2%)		2 (4%)
Fibrosis					1 (2%)
Hyperkeratosis	1 (2%)	1 (2%)			
Inflammation, Suppurative			1 (2%)		
Inflammation, Chronic					1 (2%)
Inflammation, Chronic Active	1 (2%)	2 (4%)	1 (2%)		
Ulcer		1 (2%)	1 (2%)		
Hair Follicle, Atrophy		1 (2%)			
		1 (2%)			

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Sebaceous Gland, Hyperplasia		1 (2%)				
MUSCULOSKELETAL SYSTEM			,			
Bone	(50)	(50)	(50)	(50)	(50)	
Cartilage, Joint, Degeneration		3 (6%)	2 (4%)	2 (4%)		
Skeletal Muscle	(0)	(1)	(0)	(0)	(0)	
NERVOUS SYSTEM						
Brain	(50)	(50)	(50)	(50)	(50)	
Hemorrhage				3 (6%)		
Inflammation, Acute				1 (2%)		
Necrosis		1 (2%)		1 (2%)		
Cerebrum, Gliosis					1 (2%)	
Glial Cell, Hypertrophy		1 (2%)				
Meninges, Venule, Developmental Malformation					1 (2%)	
Neuron, Necrosis	1 (2%)					
Nerve Trigeminal	(0)	(1)	(0)	(0)	(0)	
Peripheral Nerve	(1)	(1)	(0)	(0)	(0)	
Infiltration Cellular, Mononuclear Cell	1 (100%)					
Axon, Tibial, Degeneration	, ,	1 (100%)				
Spinal Cord	(0)	(1)	(0)	(0)	(0)	
Axon, Degeneration	. ,	1 (100%)	. ,	. ,	. ,	
RESPIRATORY SYSTEM						
Lung	(50)	(50)	(50)	(50)	(50)	
Fibrosis	,	1 (2%)	1 (2%)	, ,	,	
Hyperplasia, Lymphocyte		(/	1 (2%)	1 (2%)		
Infiltration Cellular, Histiocyte	30 (60%)	31 (62%)	39 (78%)	38 (76%)	40 (80%)	
Infiltration Cellular, Lymphoid	33 (3070)	J. (0270)	00 (1070)	1 (2%)	(3570)	
Inflammation, Granulomatous	6 (12%)	6 (12%)	7 (14%)	10 (20%)	8 (16%)	
illiamination, Orandiomatodo	0 (12/0)	0 (12/0)	7 (1770)	10 (2070)	0 (1070)	

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Inflammation, Acute	1 (2%)	1 (2%)		1 (2%)	1 (2%)
Inflammation, Chronic Active	2 (4%)	5 (10%)	5 (10%)	5 (10%)	4 (8%)
Mineral	1 (2%)				
Polyarteritis Nodosa			1 (2%)		
Alveolar Epithelium, Hyperplasia	1 (2%)	1 (2%)	1 (2%)	1 (2%)	3 (6%)
Alveolus, Infiltration Cellular, Histiocyte		5 (10%)			1 (2%)
Serosa, Fibrosis	1 (2%)				
Nose	(50)	(50)	(50)	(50)	(50)
Amyloid	. ,		. ,	. ,	1 (2%)
Foreign Body		1 (2%)			
Inflammation, Suppurative				1 (2%)	
Inflammation, Granulomatous		1 (2%)		. ,	
Inflammation, Acute		1 (2%)	1 (2%)	1 (2%)	
Inflammation, Chronic			1 (2%)	. ,	
Inflammation, Chronic Active	1 (2%)	8 (16%)	2 (4%)	6 (12%)	6 (12%)
Glands, Dilation	. ,	1 (2%)	. ,	1 (2%)	3 (6%)
Olfactory Epithelium, Accumulation, Hyaline Droplet	34 (68%)	33 (66%)	40 (80%)	40 (80%)	42 (84%)
Olfactory Epithelium, Metaplasia, Respiratory		4 (8%)		4 (8%)	
Respiratory Epithelium, Accumulation, Hyaline Droplet	1 (2%)				
Respiratory Epithelium, Hyperplasia	1 (2%)			1 (2%)	
Respiratory Epithelium, Metaplasia, Squamous		1 (2%)		1 (2%)	
Respiratory Epithelium, Necrosis				1 (2%)	
Trachea	(50)	(50)	(50)	(50)	(50)
Inflammation, Chronic	1 (2%)				
Inflammation, Chronic Active	2 (4%)	1 (2%)			
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	(50)
Cataract	• •		, ,	` ,	1 (2%)
Hemorrhage					1 (2%)
Choroid, Hyperplasia			1 (2%)		, ,
Cornea, Inflammation, Chronic	2 (4%)	1 (2%)	2 (4%)	1 (2%)	
Cornea, Inflammation, Chronic Active	2 (4%)	1 (2%)	2 (4%)	2 (4%)	

 $[\]ensuremath{\mathrm{a}}$ - Number of animals examined microscopically at site and number of animals with lesion

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Cornea, Necrosis				1 (2%)		
Optic Nerve, Degeneration					1 (2%)	
Retina, Degeneration	1 (2%)			1 (2%)	1 (2%)	
Retina, Dysplasia				1 (2%)	1 (2%)	
Retina, Fibrosis					1 (2%)	
Harderian Gland	(50)	(50)	(50)	(50)	(50)	
Atrophy				1 (2%)	1 (2%)	
Fibrosis				, ,	1 (2%)	
Hyperplasia	1 (2%)		1 (2%)		1 (2%)	
Inflammation, Chronic Active	, ,		, ,	2 (4%)	• •	
Metaplasia	1 (2%)			,	1 (2%)	
Necrosis	,				1 (2%)	
Duct, Metaplasia, Squamous				1 (2%)	,	
JRINARY SYSTEM						
Kidney	(50)	(50)	(50)	(50)	(50)	
Infarct	3 (6%)		1 (2%)	1 (2%)	2 (4%)	
Inflammation, Suppurative	1 (2%)					
Inflammation, Chronic				1 (2%)		
Inflammation, Chronic Active				1 (2%)		
Mineral	1 (2%)					
Nephropathy, Chronic Progressive	49 (98%)	50 (100%)	50 (100%)	49 (98%)	50 (100%)	
Polyarteritis Nodosa	1 (2%)					
Pelvis, Dilation		2 (4%)				
Renal Tubule, Accumulation, Hyaline Droplet		1 (2%)				
Renal Tubule, Cyst	1 (2%)					
Renal Tubule, Hyperplasia	1 (2%)	1 (2%)				
Renal Tubule, Hyperplasia, Atypical					1 (2%)	
Renal Tubule, Necrosis				1 (2%)		
Ureter	(0)	(1)	(0)	(0)	(0)	
Polyarteritis Nodosa	•	1 (100%)		·		
Urethra	(0)	(1)	(0)	(0)	(0)	
Urinary Bladder	(50)	(50)	(50)	(50)	(50)	

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

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Lab: BAT

Harlan Sprague Dawley RATS MALE 0 ppm Male 300 ppm Male 1000 ppm Male 3000 ppm Male 10000 ppm Male

*** END OF MALE ***

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Disposition Summary					
Animals Initially In Study	50	50	50	50	50
Early Deaths					
Moribund Sacrifice	9	10	13	9	6
Natural Death	8	6	4	7	12
Survivors					
Moribund Sacrifice			1		
Natural Death			1		1
Terminal Sacrifice	33	34	31	34	31
Animals Examined Microscopically	50	50	50	50	50
ALIMENTARY SYSTEM					
Esophagus	(50)	(50)	(50)	(50)	(49)
Intestine Large, Cecum	(50)	(50)	(50)	(49)	(48)
Polyarteritis Nodosa			2 (4%)		
Intestine Large, Colon	(50)	(50)	(50)	(50)	(48)
Hyperplasia, Lymphocyte					1 (2%)
Infiltration Cellular, Histiocyte					1 (2%)
Parasite Metazoan	2 (4%)		1 (2%)	2 (4%)	
Polyarteritis Nodosa			1 (2%)		
Intestine Large, Rectum	(50)	(49)	(50)	(50)	(50)
Parasite Metazoan	6 (12%)	6 (12%)	7 (14%)	9 (18%)	7 (14%)
Polyarteritis Nodosa			2 (4%)		
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	(48)
Polyarteritis Nodosa			1 (2%)		
Intestine Small, Ileum	(50)	(50)	(49)	(50)	(48)
Parasite Metazoan	1 (2%)		1 (2%)		
Intestine Small, Jejunum	(50)	(50)	(50)	(50)	(48)
Liver	(50)	(50)	(50)	(50)	(49)
Angiectasis	1 (2%)			1 (2%)	
Basophilic Focus	6 (12%)	7 (14%)		1 (2%)	4 (8%)
Cholangiofibrosis	1 (2%)				
Clear Cell Focus	8 (16%)	10 (20%)	14 (28%)	7 (14%)	5 (10%)
Degeneration, Cystic					1 (2%)

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

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

Test Type: CHRONIC Di(2-ethylhexyl) Phthalate Route: DOSED FEED **CAS Number:** 117-81-7 Species/Strain: RATS/HSD

Experiment Number: 10188 - 01

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

arlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Eosinophilic Focus	7 (14%)	6 (12%)	6 (12%)	3 (6%)	7 (14%)
Extramedullary Hematopoiesis	9 (18%)	4 (8%)	1 (2%)	5 (10%)	5 (10%)
Hepatodiaphragmatic Nodule	1 (2%)	1 (2%)	2 (4%)	1 (2%)	
Inflammation, Focal	1 (2%)	2 (4%)			
Inflammation, Chronic			1 (2%)		
Inflammation, Chronic Active				2 (4%)	1 (2%)
Mixed Cell Focus	3 (6%)	2 (4%)	1 (2%)		
Necrosis	2 (4%)	5 (10%)	4 (8%)	2 (4%)	4 (8%)
Pigment	3 (6%)	,	18 (36%)	30 (60%)	48 (98%)
Polyarteritis Nodosa	,		1 (2%)	, ,	•
Vacuolization Cytoplasmic			1 (2%)		
Bile Duct, Cyst	4 (8%)	3 (6%)	2 (4%)	1 (2%)	
Bile Duct, Fibrosis	,	, ,	, ,	, ,	1 (2%)
Bile Duct, Hyperplasia	6 (12%)	2 (4%)	4 (8%)	7 (14%)	1 (2%)
Centrilobular, Degeneration	1 (2%)	, ,	1 (2%)	,	, ,
Hepatocyte, Cytoplasmic Alteration	()	2 (4%)	15 (30%)	38 (76%)	45 (92%)
Hepatocyte, Fatty Change, Diffuse	1 (2%)	()	1 (2%)	(,	- (,
Hepatocyte, Hypertrophy	(6 (12%)	14 (28%)	28 (57%)
Oval Cell, Hyperplasia			1 (2%)	(,	- (
Serosa, Fibrosis	1 (2%)		1 (2%)		
Mesentery	(0)	(1)	(1)	(2)	(2)
Polyarteritis Nodosa	(-)	(· /	1 (100%)	(-)	(-)
Oral Mucosa	(1)	(0)	(0)	(0)	(0)
Cyst, Squamous	1 (100%)	(-)	(-)	(-)	(-)
Pancreas	(50)	(50)	(50)	(50)	(47)
Polyarteritis Nodosa	1 (2%)	(30)	2 (4%)	1 (2%)	\··/
Acinus, Atrophy	1 (2%)		_ (.,0)	1 (2%)	1 (2%)
Acinus, Hyperplasia	. (=,0)	1 (2%)	1 (2%)	1 (2%)	5 (11%)
Salivary Glands	(49)	(50)	(50)	(47)	(49)
Stomach, Forestomach	(50)	(50)	(50)	(50)	(50)
Inflammation, Acute	(00)	(00)	1 (2%)	(00)	2 (4%)
Inflammation, Chronic	1 (2%)		. (= /0)		1 (2%)
Inflammation, Chronic Active	2 (4%)	2 (4%)	2 (4%)	4 (8%)	3 (6%)
Mineral	2 (170)	1 (2%)	2 (170)	1 (070)	3 (370)
Polyarteritis Nodosa		1 (270)	1 (2%)		
Ulcer	2 (4%)		2 (4%)	2 (4%)	2 (4%)

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Epithelium, Hyperplasia	2 (4%)	5 (10%)	3 (6%)	6 (12%)	6 (12%)
Stomach, Glandular	(50)	(50)	(50)	(50)	(50)
Mineral	1 (2%)	3 (6%)	2 (4%)	1 (2%)	1 (2%)
Necrosis					1 (2%)
Artery, Mineral			1 (2%)		
Artery, Polyarteritis Nodosa		1 (2%)			
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	(49)
Adventitia, Aorta, Inflammation, Chronic				1 (2%)	
Aorta, Mineral	1 (2%)			1 (2%)	
Heart	(50)	(50)	(50)	(49)	(49)
Cardiomyopathy	14 (28%)	12 (24%)	16 (32%)	13 (27%)	8 (16%)
Inflammation, Chronic Active	1 (2%)				
Polyarteritis Nodosa			1 (2%)		
Myocardium, Mineral	1 (2%)				
Schwann Cell, Hyperplasia	1 (2%)				
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)	3 (6%)	1 (2%)	1 (2%)
Atrophy		1 (2%)			
Degeneration, Cystic	12 (24%)	7 (14%)	10 (20%)	11 (22%)	10 (20%)
Hemorrhage			1 (2%)		1 (2%)
Hyperplasia		3 (6%)	1 (2%)	4 (8%)	
Hypertrophy		2 (4%)		1 (2%)	
Metaplasia, Osseous	1 (2%)				
Necrosis	1 (2%)		1 (2%)	1 (2%)	1 (2%)
Thrombus		2 (4%)	5 (10%)	2 (4%)	
Adrenal Medulla	(50)	(50)	(50)	(50)	(50)
Hyperplasia	4 (8%)	3 (6%)	2 (4%)	9 (18%)	1 (2%)
Infiltration Cellular, Lymphocyte		•	•	1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)	(48)

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Hyperplasia	1 (2%)	1 (2%)			
Parathyroid Gland	(42)	(48)	(47)	(41)	(43)
Fibrosis	, ,		1 (2%)	, ,	, ,
Hyperplasia		1 (2%)	1 (2%)		
Pituitary Gland	(49)	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)			
Cyst	1 (2%)		1 (2%)		1 (2%)
Pars Distalis, Hyperplasia	20 (41%)	17 (34%)	21 (42%)	19 (38%)	10 (20%)
Pars Intermedia, Hyperplasia		1 (2%)			
Thyroid Gland	(50)	(50)	(50)	(48)	(49)
Cyst		•	·	1 (2%)	
Infiltration Cellular, Lymphocyte			1 (2%)		
Necrosis		1 (2%)			
Artery, Degeneration, Hyaline		1 (2%)			
C-cell, Hyperplasia	12 (24%)	5 (10%)	5 (10%)	4 (8%)	5 (10%)
Follicle, Cyst	1 (2%)				
Follicular Cell, Degeneration			1 (2%)		
Follicular Cell, Hyperplasia					1 (2%)
ENERAL BODY SYSTEM					
Peritoneum	(1)	(1)	(0)	(1)	(1)
Inflammation, Acute	()	(.)	(0)	(.,	1 (100%)
Inflammation, Chronic Active	1 (100%)				(10070)
ENITAL SYSTEM					
Clitoral Gland	(49)	(49)	(47)	(49)	(48)
Inflammation, Chronic Active	1 (2%)	1 (2%)	(71)	(40)	(40)
Metaplasia, Squamous	1 (2/0)	1 (2%)			
Duct, Hyperplasia		1 (2/0)	1 (2%)		
Duct, Hyperplasia Duct, Hyperplasia, Squamous		1 (2%)	1 (2/0)		
Ovary	(50)	(50)	(50)	(49)	(48)
Atrophy	(30)	1 (2%)	(30)	(40)	(+0)
Cyst	4 (8%)	2 (4%)	1 (2%)	7 (14%)	5 (10%)
ورود ا - Number of animals examined microsco	` ,			7 (1470)	3 (1076)

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Lab: BAT

arlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Bilateral, Atrophy	36 (72%)	32 (64%)	37 (74%)	34 (69%)	29 (60%)
Bursa, Cyst		2 (4%)	1 (2%)	3 (6%)	2 (4%)
Follicle, Cyst	5 (10%)	4 (8%)	8 (16%)	6 (12%)	10 (21%)
Granulosa Cell, Hyperplasia	1 (2%)				
Paraovarian Tissue, Cyst	2 (4%)	1 (2%)	1 (2%)	1 (2%)	2 (4%)
Rete Ovarii, Cyst		1 (2%)			
Rete Ovarii, Hyperplasia		, ,			2 (4%)
Oviduct	(0)	(1)	(0)	(0)	(0)
Cyst		1 (100%)	, ,	, ,	, ,
Uterus	(50)	(50)	(50)	(50)	(49)
Adenomyosis	3 (6%)	2 (4%)	2 (4%)	2 (4%)	, ,
Cyst, Squamous	1 (2%)	, ,	, ,	, ,	
Dilation	,	5 (10%)	2 (4%)	2 (4%)	1 (2%)
Hemorrhage	2 (4%)	2 (4%)	, ,	1 (2%)	2 (4%)
Hyperplasia, Adenomatous	1 (2%)	, ,		, ,	, ,
Inflammation, Suppurative	3 (6%)	2 (4%)			1 (2%)
Inflammation, Chronic	, ,	, ,	3 (6%)		, ,
Inflammation, Chronic Active	2 (4%)	9 (18%)	6 (12%)	8 (16%)	8 (16%)
Thrombus	1 (2%)	,	,	, ,	1 (2%)
Ulcer	, ,		1 (2%)		, ,
Cervix, Cyst, Squamous	1 (2%)		, ,		
Cervix, Hyperplasia, Squamous	, ,				1 (2%)
Cervix, Hypertrophy	1 (2%)	1 (2%)	1 (2%)	1 (2%)	, ,
Cervix, Inflammation, Chronic Active	1 (2%)	, ,	, ,	, ,	
Cervix, Metaplasia, Squamous		1 (2%)			
Cervix, Polyarteritis Nodosa			1 (2%)		
Endometrium, Atypical Hyperplasia	4 (8%)	5 (10%)	3 (6%)	6 (12%)	3 (6%)
Endometrium, Hyperplasia, Cystic	31 (62%)	22 (44%)	25 (50%)	27 (54%)	26 (53%)
Endometrium, Inflammation, Chronic Active	• •	. ,	1 (2%)	• •	. ,
Endometrium, Metaplasia, Squamous	34 (68%)	27 (54%)	28 (56%)	25 (50%)	12 (24%)
Vagina	(1)	(1)	(1)	(1)	(0)
Inflammation	1 (100%)		1 (100%)		

HEMATOPOIETIC SYSTEM

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Lab: BAT

arlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Bone Marrow	(50)	(50)	(50)	(50)	(50)
Congestion	3 (6%)				1 (2%)
Hypercellularity	43 (86%)	39 (78%)	43 (86%)	43 (86%)	47 (94%)
Necrosis			1 (2%)		
Pigment	1 (2%)				1 (2%)
Lymph Node	(2)	(1)	(2)	(2)	(4)
Axillary, Infiltration Cellular, Plasma Cell		1 (100%)			
Lumbar, Hyperplasia, Lymphocyte			1 (50%)		
Lumbar, Infiltration Cellular, Plasma Cell		1 (100%)			1 (25%)
Lumbar, Pigment				1 (50%)	
Mediastinal, Hemorrhage	1 (50%)				
Mediastinal, Pigment	1 (50%)				
Lymph Node, Mandibular	(48)	(50)	(50)	(47)	(49)
Atrophy					1 (2%)
Dilation	1 (2%)				
Infiltration Cellular, Plasma Cell			1 (2%)		
Lymph Node, Mediastinal	(0)	(1)	(0)	(0)	(0)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	(48)
Atrophy	2 (4%)				1 (2%)
Hyperplasia, Lymphocyte				1 (2%)	
Spleen	(50)	(50)	(50)	(50)	(47)
Accessory Spleen	1 (2%)	1 (2%)			
Extramedullary Hematopoiesis	47 (94%)	45 (90%)	45 (90%)	43 (86%)	39 (83%)
Hemorrhage					1 (2%)
Pigment	38 (76%)	38 (76%)	42 (84%)	40 (80%)	36 (77%)
White Pulp, Atrophy	5 (10%)	5 (10%)	2 (4%)	6 (12%)	7 (15%)
White Pulp, Hyperplasia			1 (2%)	1 (2%)	
Thymus	(49)	(49)	(50)	(47)	(48)
Atrophy	47 (96%)	45 (92%)	47 (94%)	45 (96%)	42 (88%)
Cyst			1 (2%)		
Hyperplasia, Lymphocyte			1 (2%)	1 (2%)	1 (2%)
Epithelial Cell, Hyperplasia		1 (2%)			

INTEGUMENTARY SYSTEM

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

Harlan Caragua Davilay DATC FEMALE	0 ppm Female	200 nnm Famala	1000 nnm Famala	2000 mm Famala	40000 mm Farmala
Harlan Sprague Dawley RATS FEMALE	U ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Mammary Gland	(50)	(50)	(50)	(50)	(50)
Galactocele			3 (6%)	3 (6%)	
Hyperplasia	13 (26%)	20 (40%)	13 (26%)	15 (30%)	9 (18%)
Inflammation, Chronic	1 (2%)				
Inflammation, Chronic Active	1 (2%)				
Skin	(50)	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		1 (2%)			
Inflammation, Acute		, ,	1 (2%)		
Inflammation, Chronic Active			,	1 (2%)	
Ulcer				1 (2%)	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	(50)
Osteopetrosis	(30)	(30)	1 (2%)	1 (2%)	(30)
Cartilage, Joint, Degeneration		1 (2%)	3 (6%)	1 (2%)	
Skeletal Muscle	(0)	(0)	(0)	(0)	(3)
Skeletal iviuscie	(0)	(0)	(0)	(0)	(3)
ERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	(50)
Hemorrhage	,	,	2 (4%)	1 (2%)	1 (2%)
Hydrocephalus			(/	1 (2%)	(/
Necrosis		1 (2%)	1 (2%)	1 (2%)	
Peripheral Nerve	(0)	(0)	(0)	(0)	(1)
Spinal Cord	(0)	(0)	(0)	(0)	(1)
Hemorrhage	(5)	(0)	(0)	(0)	1 (100%)
Hemorriage					1 (10070)
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	(49)
Infiltration Cellular, Histiocyte	47 (94%)	45 (90%)	46 (92%)	49 (98%)	48 (98%)
Inflammation, Granulomatous	6 (12%)	11 (22%)	18 (36%)	7 (14%)	10 (20%)
Inflammation, Chronic Active	16 (32%)	(== /0)	2 (4%)	6 (12%)	18 (37%)
mammadon, omorno rodvo	10 (0270)		2 (170)	0 (1270)	10 (01 /0)

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

larlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Pigment	1 (2%)				
Thrombus	1 (2%)				
Alveolar Epithelium, Hyperplasia	2 (4%)	1 (2%)	2 (4%)	3 (6%)	
Alveolus, Metaplasia, Squamous	1 (2%)				
Nose	(50)	(50)	(50)	(50)	(50)
Cyst, Squamous	1 (2%)				
Foreign Body				1 (2%)	
Inflammation, Acute				1 (2%)	
Inflammation, Chronic Active	3 (6%)	4 (8%)	2 (4%)	1 (2%)	
Olfactory Epithelium, Accumulation, Hyaline Droplet	48 (96%)	49 (98%)	50 (100%)	48 (96%)	33 (66%)
Olfactory Epithelium, Metaplasia, Respiratory		2 (4%)			1 (2%)
Respiratory Epithelium, Metaplasia, Squamous	2 (4%)				
Trachea	(50)	(50)	(50)	(49)	(49)
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(49)	(50)
Phthisis Bulbi					1 (2%)
Retinal Detachment			1 (2%)		
Choroid, Hyperplasia			2 (4%)		
Choroid, Inflammation, Chronic Active				1 (2%)	
Cornea, Inflammation, Chronic Active	1 (2%)			1 (2%)	
Retina, Degeneration		2 (4%)	1 (2%)		
Retina, Dysplasia			1 (2%)		
Harderian Gland	(50)	(50)	(50)	(49)	(49)
Atrophy				1 (2%)	
JRINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	(50)
Atrophy				2 (4%)	
Cyst			1 (2%)		
Hydronephrosis				1 (2%)	
Infarct	3 (6%)				2 (4%)

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

Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

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

Di(2-ethylhexyl) Phthalate CAS Number: 117-81-7

Date Report Requested: 12/17/2019 Time Report Requested: 10:43:08 First Dose M/F: 02/17/11 / 02/18/11

larlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female	
Inflammation, Chronic Active				1 (2%)		
Mineral	1 (2%)					
Nephropathy, Chronic Progressive	40 (80%)	34 (68%)	43 (86%)	36 (72%)	36 (72%)	
Polyarteritis Nodosa			1 (2%)			
Pelvis, Dilation		1 (2%)		2 (4%)	3 (6%)	
Pelvis, Inflammation, Suppurative					1 (2%)	
Renal Tubule, Accumulation, Hyaline Droplet			1 (2%)	1 (2%)		
Renal Tubule, Cyst	1 (2%)		, ,	, ,		
Renal Tubule, Hypertrophy	, ,				1 (2%)	
Ureter	(0)	(0)	(0)	(1)	(0)	
Dilation				1 (100%)		
Urinary Bladder	(50)	(50)	(49)	(50)	(47)	
Inflammation, Chronic Active				1 (2%)		

^{***} END OF REPORT ***