Experiment Number: 10188 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 12/17/2019 AVERAGE SEVERITY GRADES[b]

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

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

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

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Lab: BAT

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				
Inflammation, Chronic Active		1 [4.0]				
Intestine Large, Cecum	(49)	(50)	(50)	(50)	(50)	
Erosion			1 [2.0]			
Inflammation, Acute	1 [2.0]					
Inflammation, Chronic Active			1 [2.0]			
Mineral			1 [2.0]			
Polyarteritis Nodosa	5 [1.6]	1 [1.0]				
Intestine Large, Colon	(49)	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphocyte	2 [2.5]					
Inflammation, Chronic Active			1 [4.0]			
Parasite Metazoan	1	1	3		1	
Polyarteritis Nodosa	1 [2.0]	1 [2.0]			1 [3.0]	
Serosa, Hemorrhage			1 [3.0]			
Intestine Large, Rectum	(50)	(50)	(50)	(50)	(50)	
Parasite Metazoan	8	11	8	6	16	
Polyarteritis Nodosa	2 [1.5]	1 [1.0]	1 [1.0]	1 [2.0]	1 [3.0]	
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	(50)	
Intestine Small, Ileum	(48)	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	1 [2.0]	. ,	, ,	, ,	, ,	
Intestine Small, Jejunum	(49)	(50)	(50)	(50)	(50)	
Peyer's Patch, Hyperplasia	1 [2.0]	, ,	· /	` '	, ,	

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Harlan 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 [2.0]	1 [3.0]				
Basophilic Focus	6	1	6	4	3	
Cholangiofibrosis				1 [4.0]		
Clear Cell Focus	29	31	33	35	39	
Degeneration, Cystic	2 [1.0]	1 [1.0]		4 [1.0]	1 [1.0]	
Eosinophilic Focus	1		4	2	24	
Extramedullary Hematopoiesis	1 [1.0]	1 [2.0]				
Fibrosis	1 [2.0]					
Hepatodiaphragmatic Nodule				1		
Infiltration Cellular, Lymphoid				1 [2.0]		
Inflammation, Focal	2 [1.0]					
Mixed Cell Focus	1	1	1	2	1	
Necrosis		2 [1.5]	4 [1.0]	7 [1.3]	8 [1.3]	
Pigment			7 [1.0]	45 [1.8]	50 [2.5]	
Polyarteritis Nodosa	1 [1.0]	1 [2.0]				
Bile Duct, Cyst	2		1			
Bile Duct, Dilation		2 [2.5]	1 [3.0]	2 [3.0]		
Bile Duct, Hyperplasia	9 [1.2]	14 [1.1]	11 [1.1]	8 [1.4]	11 [1.0]	
Bile Duct, Inflammation, Chronic Active		1 [3.0]				
Hepatocyte, Cytoplasmic Alteration		1 [2.0]		38 [1.3]	49 [3.6]	
Hepatocyte, Fatty Change, Diffuse		1 [2.0]				
Hepatocyte, Hypertrophy				2 [1.0]	6 [1.2]	
Mesentery	(2)	(5)	(1)	(3)	(4)	
Hemorrhage	( )	. ,	1 [4.0]	1 [4.0]	` ,	
Polyarteritis Nodosa	2 [2.5]	3 [1.7]	1 [1.0]	1 [1.0]	1 [2.0]	
Arteriole, Mineral			1 [1.0]			
Fat, Necrosis		1 [1.0]			1 [2.0]	
Oral Mucosa	(0)	(1)	(0)	(1)	(1)	
Gingival, Cyst	( )	. ,	( )	( )	1	
Pancreas	(49)	(50)	(50)	(50)	(50)	
Basophilic Focus	1	, ,	, ,	, ,	, ,	
Cholangiofibrosis		1 [3.0]				
Edema		1 [2.0]				
Fatty Infiltration		1 [2.0]				
Fibrosis					1 [2.0]	

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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 [2.0]		
Inflammation, Chronic Active	1 [2.0]	1 [2.0]			1 [3.0]	
Polyarteritis Nodosa	6 [2.2]	4 [2.8]	7 [2.0]	2 [2.5]	2 [2.0]	
Acinus, Atrophy	3 [2.0]	3 [1.0]	4 [1.0]	2 [1.5]	5 [2.0]	
Acinus, Hyperplasia	7 [2.6]	8 [2.3]	9 [1.8]	24 [3.3]	26 [3.0]	
Bile Duct, Dilation		1 [2.0]			2 [2.0]	
Duct, Inflammation, Chronic Active	1 [1.0]					
Salivary Glands	(50)	(50)	(50)	(50)	(50)	
Fibrosis					1 [2.0]	
Inflammation, Chronic Active					1 [2.0]	
Stomach, Forestomach	(50)	(50)	(50)	(50)	(50)	
Inflammation, Granulomatous					1 [2.0]	
Inflammation, Chronic				1 [1.0]		
Inflammation, Chronic Active	1 [2.0]	1 [2.0]			2 [1.5]	
Mineral	1 [1.0]			1 [1.0]		
Polyarteritis Nodosa				• •	1 [2.0]	
Ulcer		1 [1.0]				
Epithelium, Dysplasia				1 [1.0]		
Epithelium, Hyperplasia	3 [2.0]	3 [1.7]	1 [1.0]	1 [1.0]	3 [3.0]	
Stomach, Glandular	(50)	(50)	(50)	(50)	(50)	
Cyst, Squamous	1	, ,	, ,	, ,	, ,	
Inflammation, Acute				1 [1.0]		
Inflammation, Chronic Active		1 [1.0]				
Mineral	3 [3.3]	1 [2.0]	1 [2.0]	3 [2.3]		
Polyarteritis Nodosa		1 [1.0]				
Thrombus				1 [1.0]		
Glands, Amyloid			1 [2.0]			
Tooth	(0)	(1)	(0)	(0)	(0)	
Inflammation, Suppurative	, <i>,</i>	1 [3.0]	. ,	. ,	, <i>,</i>	
CARDIOVASCULAR SYSTEM						
Blood Vessel	(50)	(50)	(50)	(50)	(50)	
Aneurysm	(00)	1 [1.0]	(00)	(00)	1 [3.0]	
Infiltration Cellular, Histiocyte		1 [2.0]			. [0.0]	

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male	
Mineral	1 [1.0]					
Aorta, Mineral	2 [3.0]	1 [2.0]	1 [2.0]	2 [2.5]	5 [1.0]	
Aorta, Polyarteritis Nodosa		1 [2.0]				
Pulmonary Artery, Mineral				1 [4.0]		
Pulmonary Vein, Mineral				1 [4.0]	1 [1.0]	
Heart	(50)	(50)	(50)	(50)	(50)	
Angiectasis			1 [4.0]			
Cardiomyopathy	42 [1.6]	41 [1.5]	47 [1.4]	37 [1.3]	30 [1.3]	
Inflammation, Acute				1 [3.0]		
Mineral				1 [3.0]		
Polyarteritis Nodosa	2 [1.5]					
Thrombus				1 [1.0]		
Artery, Mineral				1 [1.0]		
Artery, Polyarteritis Nodosa				1 [1.0]		
Myocardium, Necrosis				1 [1.0]		
Valve, Degeneration					1 [1.0]	
Valve, Fibrosis	2 [1.5]			1 [1.0]	9 [1.9]	
Valve, Thrombus				2 [2.5]	6 [1.8]	
Vein, Mineral				1 [1.0]		
ENDOCRINE SYSTEM						
Adrenal Cortex	(50)	(49)	(50)	(50)	(50)	
Atypia Cellular	1 [1.0]					
Degeneration, Cystic			1 [1.0]		2 [1.5]	
Hyperplasia	5 [1.6]	4 [1.8]	10 [2.1]	4 [2.0]	3 [1.0]	
Hypertrophy, Focal	3 [1.7]	6 [2.0]	10 [1.8]	6 [1.8]	5 [1.4]	
Mineral	1 [1.0]					
Necrosis	1 [2.0]		1 [4.0]			
Pigment			1 [2.0]			
Thrombus		1 [2.0]				
Bilateral, Hypertrophy, Focal				3 [1.7]		
Adrenal Medulla	(50)	(50)	(50)	(50)	(50)	
Hyperplasia, Focal	7 [2.0]	9 [2.0]	8 [1.8]	4 [2.0]	2 [1.0]	
Bilateral, Hyperplasia, Focal		1 [3.0]				

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Islets, Pancreatic       (49)       (50)       (50)         Atrophy       (49)       (50)       (50)         Hyperplasia       4 [1.5]       1 [1.0]         Pigment       1 [2.0]       (43)       (43)       (45)         Hyperplasia, Focal       2 [1.5]       1 [2.0]       1 [2.0]         Hyperplasia, Diffuse       5 [2.4]       2 [1.5]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]       (50)       (50)       (50)         Cyst       (50)       (50)       (50)       (50)       (50)         Pigment, Cholesterol       1 [1.0]       23 [2.0]       26 [2.2]	a 3000 ppm Male	10000 ppm Male	
Hyperplasia       4 [1.5]       1 [1.0]         Pigment       1 [2.0]         Parathyroid Gland       (43)       (43)       (45)         Hyperplasia, Focal       2 [1.5]       1 [2.0]         Hyperplasia, Diffuse       5 [2.4]       2 [1.5]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]       2 [1.5]       (50)       (50)       (50)         Cyst       (50)       (50)       (50)       (50)       (50)       (50)       (50)         Pigment, Cholesterol       1 [1.0]       28 [1.5]       23 [2.0]       26 [2.2]	(50)	(50)	
Pigment       1 [2.0]         Parathyroid Gland       (43)       (43)       (45)         Hyperplasia, Focal       2 [1.5]       1 [2.0]         Hyperplasia, Diffuse       5 [2.4]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]         Pituitary Gland       (50)       (50)         Cyst       (50)       (50)         Pigment, Cholesterol       1 [1.0]         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]	1 [3.0]		
Parathyroid Gland       (43)       (43)       (45)         Hyperplasia, Focal       2 [1.5]       1 [2.0]         Hyperplasia, Diffuse       5 [2.4]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]         Pituitary Gland       (50)       (50)         Cyst       (50)       (50)         Pigment, Cholesterol       1 [1.0]         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]	6 [2.5]	2 [1.5]	
Hyperplasia, Focal       2 [1.5]       1 [2.0]         Hyperplasia, Diffuse       5 [2.4]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]         Pituitary Gland       (50)       (50)       (50)         Cyst       Figment, Cholesterol       1 [1.0]       23 [2.0]       26 [2.2]	1 [1.0]		
Hyperplasia, Diffuse       5 [2.4]       2 [1.5]         Bilateral, Hyperplasia, Diffuse       2 [2.5]         Pituitary Gland       (50)       (50)       (50)         Cyst       (50)       (50)       (50)         Pigment, Cholesterol       1 [1.0]       (50)       (50)       (50)         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]	(50)	(40)	
Bilateral, Hyperplasia, Diffuse       2 [2.5]         Pituitary Gland       (50)       (50)       (50)         Cyst       (50)       (50)       (50)         Pigment, Cholesterol       1 [1.0]       (50)       (50)       (50)         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]			
Pituitary Gland       (50)       (50)       (50)         Cyst       1 [1.0]         Pigment, Cholesterol       1 [1.0]         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]			
Cyst         Pigment, Cholesterol       1 [1.0]         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]	1 [4.0]		
Pigment, Cholesterol       1 [1.0]         Pars Distalis, Hyperplasia       28 [1.5]       23 [2.0]       26 [2.2]	(50)	(50)	
Pars Distalis, Hyperplasia 28 [1.5] 23 [2.0] 26 [2.2]		1	
	24 [2.1]	23 [2.2]	
Pars Distalis, Hypertrophy 8 [1.0] 10 [1.2] 11 [1.2]	14 [1.1]	37 [1.9]	
Pars Distalis, Necrosis	1 [1.0]		
Pars Intermedia, Hyperplasia 1 [3.0] 4 [1.5]	1 [2.0]		
Thyroid Gland (50) (50) (50)	(50)	(50)	
Inflammation, Acute	1 [1.0]	, ,	
Inflammation, Chronic 1 [1.0]			
C-cell, Hyperplasia 10 [2.2] 8 [2.3] 4 [1.8]	6 [2.0]	11 [2.3]	
Follicle, Cyst 1			
Follicular Cell, Hyperplasia 1 [1.0] 1 [1.0]			
GENERAL BODY SYSTEM			
Peritoneum (1) (0) (0)	(0)	(0)	
Tissue NOS (0) (1)	(0)	(0)	
GENITAL SYSTEM			
Epididymis (50) (50) (50)	(50)	(50)	
Hypospermia 1 [3.0]	(/	()	
Necrosis 1 [1.0]			
Polyarteritis Nodosa 1 [1.0] 1 [1.0]			
Bilateral, Hypospermia 4 [3.8] 3 [3.7] 4 [3.3]	3 [3.7]	43 [4.0]	
Bilateral, Inflammation, Suppurative 1 [2.0]	Ç [O., ]		

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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 [1.0]					
Bilateral, Inflammation, Chronic Active			1 [2.0]		1 [2.0]	
Bilateral, Polyarteritis Nodosa	1 [2.0]	1 [2.0]			1 [3.0]	
Bilateral, Duct, Exfoliated Germ Cell	2 [2.0]	3 [2.0]	4 [2.0]	4 [2.0]	36 [1.4]	
Penis	(0)	(0)	(1)	(0)	(0)	
Prolapse			1			
Ulcer			1 [2.0]			
Preputial Gland	(49)	(50)	(50)	(50)	(50)	
Inflammation, Chronic					1 [2.0]	
Inflammation, Chronic Active	1 [3.0]	1 [1.0]	1 [4.0]		1 [4.0]	
Metaplasia, Squamous	1 [3.0]				1 [4.0]	
Mineral	1 [2.0]					
Duct, Hyperplasia, Squamous			1 [2.0]	1 [1.0]	1 [2.0]	
Prostate	(50)	(50)	(50)	(50)	(50)	
Edema		1 [2.0]				
Hyperplasia	1 [1.0]					
Inflammation, Suppurative	1 [4.0]					
Inflammation, Chronic Active				1 [4.0]		
Polyarteritis Nodosa		1 [1.0]			1 [2.0]	
Dorsal, Epithelium, Lateral, Hyperplasia	1 [1.0]					
Dorsal, Lateral, Inflammation, Granulomatous			1 [1.0]		1 [1.0]	
Dorsal, Lateral, Inflammation, Acute	1 [2.0]					
Dorsal, Lateral, Inflammation, Chronic	1 [1.0]					
Dorsal, Lateral, Inflammation, Chronic Active	1 [1.0]	2 [1.0]	3 [1.0]	2 [2.0]	2 [1.5]	
Epithelium, Ventral, Hyperplasia	3 [1.7]	4 [2.5]	5 [2.2]	1 [3.0]	5 [3.0]	
Ventral, Inflammation, Acute			1 [1.0]			
Ventral, Inflammation, Chronic	1 [1.0]					
Ventral, Inflammation, Chronic Active		2 [1.0]				
Seminal Vesicle	(50)	(50)	(50)	(50)	(50)	
Hyperplasia		1 [1.0]				
Infiltration Cellular, Lymphoid				1 [2.0]		
Inflammation, Suppurative	1 [3.0]					
Inflammation, Chronic Active				2 [2.5]		
Mineral				1 [2.0]		
Polyarteritis Nodosa		1 [1.0]				
Testis	(50)	(50)	(50)	(50)	(50)	

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Edema	5 [1.6]	8 [1.3]	7 [1.0]	10 [1.2]	6 [2.7]	
Granuloma Sperm	1 [3.0]		1 [2.0]			
Polyarteritis Nodosa	1 [2.0]	1 [4.0]	1 [3.0]			
Bilateral, Edema	22 [1.2]	15 [1.0]	22 [1.2]	14 [1.2]	39 [2.7]	
Bilateral, Polyarteritis Nodosa	24 [2.1]	20 [1.8]	14 [1.7]	4 [2.0]	5 [2.2]	
Bilateral, Germinal Epithelium, Degeneration	29 [1.6]	18 [1.7]	19 [1.5]	19 [1.7]	48 [3.7]	
Bilateral, Interstitial Cell, Hyperplasia					1 [1.0]	
Germinal Epithelium, Degeneration	2 [2.0]	7 [1.6]	2 [2.0]	3 [1.0]	2 [2.5]	
Interstitial Cell, Hyperplasia	1 [3.0]	1 [3.0]		4 [2.0]	3 [2.7]	
HEMATOPOIETIC SYSTEM						
Bone Marrow	(50)	(50)	(50)	(50)	(50)	
Congestion		1 [2.0]	1 [2.0]	1 [2.0]	2 [1.5]	
Hypercellularity	18 [2.1]	22 [2.1]	30 [1.8]	25 [1.8]	34 [1.9]	
Myelofibrosis				1 [1.0]		
Lymph Node	(1)	(2)	(2)	(4)	(0)	
Lumbar, Hyperplasia, Lymphocyte			1 [2.0]			
Mediastinal, Hemorrhage				1 [2.0]		
Renal, Dilation			1 [4.0]			
Renal, Inflammation, Chronic			1 [1.0]			
Renal, Pigment			1 [2.0]			
Lymph Node, Mandibular	(49)	(50)	(50)	(50)	(50)	
Atrophy	1 [3.0]	1 [4.0]	, ,	• •		
Dilation	3 [2.0]				1 [3.0]	
Hyperplasia, Lymphocyte				1 [2.0]		
Infiltration Cellular, Plasma Cell	3 [1.7]	1 [3.0]	1 [3.0]			
Inflammation, Chronic	1 [1.0]					
Inflammation, Chronic Active				1 [4.0]		
Necrosis	1 [2.0]					
Lymph Node, Mesenteric	(49)	(50)	(50)	(50)	(50)	
Atrophy	1 [4.0]	1 [3.0]	( - /	( - )	,	
Dilation	2 [2.0]	F1				
Fibrosis	r -1	1 [2.0]				
Hyperplasia, Lymphocyte	1 [4.0]	1 [2.0]			1 [3.0]	

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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, Plasma Cell	2 [2.5]					
Inflammation, Acute	1 [2.0]					
Spleen	(50)	(50)	(50)	(50)	(50)	
Accessory Spleen				1		
Extramedullary Hematopoiesis	45 [1.9]	45 [2.0]	44 [2.0]	45 [1.9]	44 [1.8]	
Fibrosis				1 [2.0]		
Hemorrhage				2 [4.0]		
Infiltration Cellular, Lipocyte			1 [1.0]			
Necrosis			1 [2.0]			
Pigment	45 [1.8]	44 [1.6]	47 [1.6]	42 [1.6]	43 [1.8]	
White Pulp, Atrophy	1 [3.0]	7 [2.3]	4 [2.3]	3 [2.3]	1 [3.0]	
White Pulp, Hyperplasia	1 [2.0]					
Thymus	(48)	(47)	(49)	(50)	(46)	
Atrophy	41 [2.2]	43 [2.4]	49 [2.5]	48 [2.6]	44 [2.3]	
Ectopic Parathyroid Gland	1 [1.0]				1 [1.0]	
Hyperplasia, Lymphocyte	1 [3.0]	1 [2.0]				
Infiltration Cellular, Lipocyte	1 [2.0]					
Polyarteritis Nodosa	1 [2.0]	1 [2.0]				
Epithelial Cell, Hyperplasia		1 [1.0]				
INTEGUMENTARY SYSTEM						
Mammary Gland	(50)	(50)	(49)	(50)	(50)	
Fibrosis	()	()	1 [2.0]	()	()	
Inflammation, Chronic Active			1 [4.0]			
Skin	(49)	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	5	(/	1	()	2	
Fibrosis	•				1 [3.0]	
Hyperkeratosis	1 [2.0]	1 [2.0]			. [0.0]	
Inflammation, Suppurative	. []	. [0]	1 [4.0]			
Inflammation, Chronic			. []		1 [3.0]	
Inflammation, Chronic Active	1 [4.0]	2 [2.0]	1 [3.0]		. [0.0]	
Ulcer	. [•]	1 [3.0]	1 [3.0]			
Hair Follicle, Atrophy		1 [4.0]	. [0.0]			
Hair Follicle, Inflammation, Chronic		1 [2.0]				

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)

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

Experiment Number: 10188 - 01

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

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
Sebaceous Gland, Hyperplasia		1 [3.0]			
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	(50)
Cartilage, Joint, Degeneration		3 [1.0]	2 [1.5]	2 [1.0]	
Skeletal Muscle	(0)	(1)	(0)	(0)	(0)
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	(50)
Hemorrhage				3 [3.0]	
Inflammation, Acute				1 [2.0]	
Necrosis		1 [2.0]		1 [4.0]	
Cerebrum, Gliosis					1 [2.0]
Glial Cell, Hypertrophy		1 [1.0]			
Meninges, Venule, Developmental Malformation					1 [1.0]
Neuron, Necrosis	1 [2.0]				
Nerve Trigeminal	(0)	(1)	(0)	(0)	(0)
Peripheral Nerve	(1)	(1)	(0)	(0)	(0)
Infiltration Cellular, Mononuclear Cell	1 [1.0]				
Axon, Tibial, Degeneration		1 [1.0]			
Spinal Cord	(0)	(1)	(0)	(0)	(0)
Axon, Degeneration		1 [2.0]			
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	(50)
Fibrosis	·	1 [3.0]	1 [1.0]		•
Hyperplasia, Lymphocyte		· -	1 [1.0]	1 [2.0]	
Infiltration Cellular, Histiocyte	30 [1.6]	31 [1.7]	39 [1.7]	38 [1.5]	40 [1.9]
Infiltration Cellular, Lymphoid				1 [2.0]	
Inflammation, Granulomatous	6 [1.0]	6 [1.0]	7 [1.0]	10 [1.0]	8 [1.1]

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

Experiment Number: 10188 - 01

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

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 [1.0]	1 [3.0]		1 [1.0]	1 [1.0]	
Inflammation, Chronic Active	2 [1.0]	5 [1.8]	5 [1.2]	5 [1.4]	4 [1.0]	
Mineral	1 [4.0]					
Polyarteritis Nodosa			1 [1.0]			
Alveolar Epithelium, Hyperplasia	1 [2.0]	1 [1.0]	1 [3.0]	1 [1.0]	3 [2.3]	
Alveolus, Infiltration Cellular, Histiocyte		5 [1.4]			1 [3.0]	
Serosa, Fibrosis	1 [1.0]					
Nose	(50)	(50)	(50)	(50)	(50)	
Amyloid					1 [1.0]	
Foreign Body		1				
Inflammation, Suppurative				1 [3.0]		
Inflammation, Granulomatous		1 [1.0]				
Inflammation, Acute		1 [1.0]	1 [1.0]	1 [2.0]		
Inflammation, Chronic			1 [1.0]			
Inflammation, Chronic Active	1 [1.0]	8 [1.1]	2 [1.0]	6 [1.2]	6 [1.2]	
Glands, Dilation		1 [1.0]		1 [1.0]	3 [1.7]	
Olfactory Epithelium, Accumulation, Hyaline Droplet	34 [1.7]	33 [1.8]	40 [1.5]	40 [1.5]	42 [1.2]	
Olfactory Epithelium, Metaplasia, Respiratory		4 [1.3]		4 [1.3]		
Respiratory Epithelium, Accumulation, Hyaline Droplet	1 [2.0]					
Respiratory Epithelium, Hyperplasia	1 [1.0]			1 [1.0]		
Respiratory Epithelium, Metaplasia, Squamous		1 [1.0]		1 [2.0]		
Respiratory Epithelium, Necrosis				1 [2.0]		
Trachea	(50)	(50)	(50)	(50)	(50)	
Inflammation, Chronic	1 [1.0]					
Inflammation, Chronic Active	2 [1.5]	1 [1.0]				
SPECIAL SENSES SYSTEM						
Eye	(50)	(50)	(50)	(50)	(50)	
Cataract	( - /	ζ /	V - 7	V - /	1 [2.0]	
Hemorrhage					1 [4.0]	
Choroid, Hyperplasia			1 [3.0]		. [ ]	
Cornea, Inflammation, Chronic	2 [1.0]	1 [1.0]	2 [1.0]	1 [1.0]		
Cornea, Inflammation, Chronic Active	2 [2.0]	1 [1.0]	2 [2.0]	2 [2.5]		

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Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

Experiment Number: 10188 - 01

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

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 [2.0]	
Optic Nerve, Degeneration					1 [4.0]
Retina, Degeneration	1 [2.0]			1 [1.0]	1 [4.0]
Retina, Dysplasia				1 [1.0]	1 [1.0]
Retina, Fibrosis					1 [2.0]
Harderian Gland	(50)	(50)	(50)	(50)	(50)
Atrophy				1 [4.0]	1 [3.0]
Fibrosis					1 [2.0]
Hyperplasia	1 [2.0]		1 [1.0]		1 [1.0]
Inflammation, Chronic Active	-		-	2 [3.0]	-
Metaplasia	1 [2.0]			-	1 [1.0]
Necrosis					1 [1.0]
Duct, Metaplasia, Squamous				1 [3.0]	
JRINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	(50)
Infarct	3 [1.0]		1 [1.0]	1 [1.0]	2 [2.0]
Inflammation, Suppurative	1 [4.0]				
Inflammation, Chronic				1 [2.0]	
Inflammation, Chronic Active				1 [2.0]	
Mineral	1 [4.0]				
Nephropathy, Chronic Progressive	49 [2.7]	50 [2.6]	50 [2.4]	49 [2.3]	50 [1.6]
Polyarteritis Nodosa	1 [2.0]				
Pelvis, Dilation		2 [2.0]			
Renal Tubule, Accumulation, Hyaline Droplet		1 [4.0]			
Renal Tubule, Cyst	1				
Renal Tubule, Hyperplasia	1 [1.0]	1 [2.0]			
Renal Tubule, Hyperplasia, Atypical					1 [1.0]
Renal Tubule, Necrosis				1 [2.0]	
Ureter	(0)	(1)	(0)	(0)	(0)
Polyarteritis Nodosa		1 [2.0]			
Urethra	(0)	(1)	(0)	(0)	(0)
Urinary Bladder	(50)	(50)	(50)	(50)	(50)

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Experiment Number: 10188 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 12/17/2019 **AVERAGE SEVERITY GRADES[b]** 

**CAS Number:** 117-81-7

Di(2-ethylhexyl) Phthalate

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 \*\*\*

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

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

Lab: BAT

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 [2.0]	,	,
Intestine Large, Colon	(50)	(50)	(50)	(50)	(48)
Hyperplasia, Lymphocyte	, ,	, ,	, ,	, ,	1 [2.0]
Infiltration Cellular, Histiocyte					1 [2.0]
Parasite Metazoan	2		1	2	
Polyarteritis Nodosa			1 [2.0]		
Intestine Large, Rectum	(50)	(49)	(50)	(50)	(50)
Parasite Metazoan	6	6	7	9	7
Polyarteritis Nodosa			2 [1.5]		
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	(48)
Polyarteritis Nodosa			1 [1.0]		
Intestine Small, Ileum	(50)	(50)	(49)	(50)	(48)
Parasite Metazoan	1		1		
Intestine Small, Jejunum	(50)	(50)	(50)	(50)	(48)
Liver	(50)	(50)	(50)	(50)	(49)
Angiectasis	1 [1.0]			1 [3.0]	
Basophilic Focus	6	7		1	4
Cholangiofibrosis	1 [2.0]				
Clear Cell Focus	8	10	14	7	5
Degeneration, Cystic					1 [1.0]

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Experiment Number: 10188 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Experiment Number: 10188 - 01

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

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	
Eosinophilic Focus	7	6	6	3	7	
Extramedullary Hematopoiesis	9 [1.2]	4 [1.0]	1 [1.0]	5 [1.0]	5 [1.0]	
Hepatodiaphragmatic Nodule	1	1	2	1		
Inflammation, Focal	1 [2.0]	2 [1.5]				
Inflammation, Chronic			1 [1.0]			
Inflammation, Chronic Active				2 [1.5]	1 [3.0]	
Mixed Cell Focus	3	2	1			
Necrosis	2 [1.0]	5 [1.8]	4 [1.5]	2 [2.5]	4 [2.0]	
Pigment	3 [1.0]		18 [1.1]	30 [1.3]	48 [2.5]	
Polyarteritis Nodosa			1 [3.0]			
Vacuolization Cytoplasmic			1 [4.0]			
Bile Duct, Cyst	4	3	2	1		
Bile Duct, Fibrosis					1 [2.0]	
Bile Duct, Hyperplasia	6 [1.0]	2 [1.0]	4 [1.0]	7 [1.0]	1 [1.0]	
Centrilobular, Degeneration	1 [2.0]		1 [2.0]		• •	
Hepatocyte, Cytoplasmic Alteration		2 [1.0]	15 [1.1]	38 [1.3]	45 [2.8]	
Hepatocyte, Fatty Change, Diffuse	1 [3.0]		1 [2.0]			
Hepatocyte, Hypertrophy			6 [1.2]	14 [1.0]	28 [1.3]	
Oval Cell, Hyperplasia			1 [3.0]			
Serosa, Fibrosis	1 [1.0]		1 [2.0]			
Mesentery	(0)	(1)	(1)	(2)	(2)	
Polyarteritis Nodosa	· ,	,	1 [3.0]	. ,	•	
Oral Mucosa	(1)	(0)	(0)	(0)	(0)	
Cyst, Squamous	1	,	· /	. ,	•	
Pancreas	(50)	(50)	(50)	(50)	(47)	
Polyarteritis Nodosa	1 [2.0]	,	2 [3.0]	1 [1.0]	,	
Acinus, Atrophy	1 [1.0]			1 [1.0]	1 [1.0]	
Acinus, Hyperplasia		1 [2.0]	1 [1.0]	1 [1.0]	5 [3.0]	
Salivary Glands	(49)	(50)	(50)	(47)	(49)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	(50)	
Inflammation, Acute	,	,	1 [1.0]	` '	2 [1.0]	
Inflammation, Chronic	1 [2.0]				1 [1.0]	
Inflammation, Chronic Active	2 [2.5]	2 [1.0]	2 [1.5]	4 [1.5]	3 [1.7]	
Mineral		1 [1.0]			• •	
Polyarteritis Nodosa			1 [1.0]			
Ulcer	2 [2.0]		2 [1.5]	2 [1.5]	2 [3.0]	

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)

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

Experiment Number: 10188 - 01

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

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 [2.0]	5 [1.6]	3 [1.3]	6 [2.2]	6 [2.0]	
Stomach, Glandular	(50)	(50)	(50)	(50)	(50)	
Mineral	1 [1.0]	3 [1.3]	2 [1.5]	1 [2.0]	1 [1.0]	
Necrosis					1 [2.0]	
Artery, Mineral			1 [1.0]			
Artery, Polyarteritis Nodosa		1 [1.0]				
CARDIOVASCULAR SYSTEM						
Blood Vessel	(50)	(50)	(50)	(50)	(49)	
Adventitia, Aorta, Inflammation, Chronic	()	()	()	1 [2.0]	( - /	
Aorta, Mineral	1 [2.0]			1 [2.0]		
Heart	(50)	(50)	(50)	(49)	(49)	
Cardiomyopathy	14 [1.1]	12 [1.0]	16 [1.0]	13 [1.0]	8 [1.0]	
Inflammation, Chronic Active	1 [2.0]	,	- 1 - 1	- 1 - 1		
Polyarteritis Nodosa	. []		1 [2.0]			
Myocardium, Mineral	1 [2.0]		. []			
Schwann Cell, Hyperplasia	1 [1.0]					
ENDOCRINE SYSTEM						
Adrenal Cortex	(50)	(50)	(50)	(50)	(50)	
Angiectasis	, ,	1 [2.0]	3 [1.7]	1 [2.0]	1 [2.0]	
Atrophy		1 [4.0]				
Degeneration, Cystic	12 [1.4]	7 [1.3]	10 [1.3]	11 [1.2]	10 [1.5]	
Hemorrhage			1 [2.0]		1 [3.0]	
Hyperplasia		3 [1.3]	1 [2.0]	4 [1.5]		
Hypertrophy		2 [1.5]		1 [2.0]		
Metaplasia, Osseous	1 [2.0]					
Necrosis	1 [2.0]		1 [4.0]	1 [1.0]	1 [3.0]	
Thrombus		2 [1.5]	5 [1.2]	2 [1.5]		
Adrenal Medulla	(50)	(50)	(50)	(50)	(50)	
Hyperplasia	4 [1.5]	3 [1.0]	2 [1.0]	9 [1.3]	1 [1.0]	
Infiltration Cellular, Lymphocyte			• •	1 [2.0]	• •	
Islets, Pancreatic	(50)	(50)	(50)	(50)	(48)	

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Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

Experiment Number: 10188 - 01

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

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female	
Hyperplasia	1 [3.0]	1 [2.0]				
Parathyroid Gland	(42)	(48)	(47)	(41)	(43)	
Fibrosis			1 [2.0]			
Hyperplasia		1 [3.0]	1 [3.0]			
Pituitary Gland	(49)	(50)	(50)	(50)	(50)	
Angiectasis		1 [3.0]				
Cyst	1		1		1	
Pars Distalis, Hyperplasia	20 [2.1]	17 [1.8]	21 [1.9]	19 [1.7]	10 [1.6]	
Pars Intermedia, Hyperplasia		1 [1.0]				
Thyroid Gland	(50)	(50)	(50)	(48)	(49)	
Cyst				1		
Infiltration Cellular, Lymphocyte			1 [1.0]			
Necrosis		1 [4.0]				
Artery, Degeneration, Hyaline		1 [3.0]				
C-cell, Hyperplasia	12 [2.8]	5 [1.8]	5 [2.4]	4 [3.5]	5 [3.0]	
Follicle, Cyst	1					
Follicular Cell, Degeneration			1 [1.0]			
Follicular Cell, Hyperplasia					1 [1.0]	
GENERAL BODY SYSTEM						
Peritoneum	(1)	(1)	(0)	(1)	(1)	
Inflammation, Acute	(-)	( · /	(0)	( · /	1 [2.0]	
Inflammation, Chronic Active	1 [2.0]				. [2.0]	
GENITAL SYSTEM						
Clitoral Gland	(49)	(49)	(47)	(49)	(48)	
Inflammation, Chronic Active	1 [4.0]	1 [4.0]	(71)	(40)	(40)	
Metaplasia, Squamous	ו ניידן	1 [3.0]				
Duct, Hyperplasia		1 [0.0]	1 [2.0]			
Duct, Hyperplasia, Squamous		1 [4.0]	۰ رح.۰٫			
Ovary	(50)	(50)	(50)	(49)	(48)	
Atrophy	(50)	1 [2.0]	(00)	(40)	(40)	
Cyst	4	2	1	7	5	
-,	•	<b>-</b>	•	•	•	

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Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female	
Bilateral, Atrophy	36 [2.0]	32 [2.2]	37 [2.1]	34 [2.0]	29 [2.1]	
Bursa, Cyst		2	1	3	2	
Follicle, Cyst	5	4	8	6	10	
Granulosa Cell, Hyperplasia	1 [1.0]					
Paraovarian Tissue, Cyst	2	1	1	1	2	
Rete Ovarii, Cyst		1				
Rete Ovarii, Hyperplasia					2 [2.0]	
Oviduct	(0)	(1)	(0)	(0)	(0)	
Cyst	,	1	( )	( )	,	
Uterus	(50)	(50)	(50)	(50)	(49)	
Adenomyosis	3 [2.3]	2 [2.0]	2 [1.0]	2 [1.5]	,	
Cyst, Squamous	1					
Dilation		5 [3.4]	2 [4.0]	2 [4.0]	1 [4.0]	
Hemorrhage	2 [4.0]	2 [4.0]		1 [4.0]	2 [1.5]	
Hyperplasia, Adenomatous	1 [2.0]					
Inflammation, Suppurative	3 [2.3]	2 [2.0]			1 [4.0]	
Inflammation, Chronic			3 [1.3]			
Inflammation, Chronic Active	2 [2.5]	9 [2.0]	6 [2.5]	8 [2.0]	8 [3.0]	
Thrombus	1 [2.0]				1 [2.0]	
Ulcer			1 [2.0]			
Cervix, Cyst, Squamous	1					
Cervix, Hyperplasia, Squamous					1 [2.0]	
Cervix, Hypertrophy	1 [3.0]	1 [3.0]	1 [3.0]	1 [3.0]		
Cervix, Inflammation, Chronic Active	1 [2.0]					
Cervix, Metaplasia, Squamous		1 [4.0]				
Cervix, Polyarteritis Nodosa			1 [1.0]			
Endometrium, Atypical Hyperplasia	4 [1.8]	5 [1.8]	3 [1.3]	6 [1.0]	3 [2.3]	
Endometrium, Hyperplasia, Cystic	31 [1.8]	22 [1.9]	25 [1.6]	27 [1.6]	26 [2.7]	
Endometrium, Inflammation, Chronic Active			1 [2.0]		• •	
Endometrium, Metaplasia, Squamous	34 [2.3]	27 [1.8]	28 [2.1]	25 [1.9]	12 [1.8]	
Vagina	(1)	(1)	(1)	(1)	(0)	
Inflammation	1 [3.0]	,	1 [3.0]	. ,	. ,	

#### HEMATOPOIETIC SYSTEM

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)

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

Experiment Number: 10188 - 01

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

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 [1.7]				1 [2.0]
Hypercellularity	43 [2.7]	39 [2.8]	43 [2.7]	43 [2.7]	47 [2.9]
Necrosis			1 [3.0]		
Pigment	1 [1.0]				1 [1.0]
Lymph Node	(2)	(1)	(2)	(2)	(4)
Axillary, Infiltration Cellular, Plasma Cell	. ,	1 [4.0]	, ,	, ,	
Lumbar, Hyperplasia, Lymphocyte			1 [2.0]		
Lumbar, Infiltration Cellular, Plasma Cell		1 [3.0]			1 [3.0]
Lumbar, Pigment				1 [2.0]	
Mediastinal, Hemorrhage	1 [2.0]				
Mediastinal, Pigment	1 [2.0]				
Lymph Node, Mandibular	(48)	(50)	(50)	(47)	(49)
Atrophy					1 [2.0]
Dilation	1 [4.0]				
Infiltration Cellular, Plasma Cell			1 [3.0]		
Lymph Node, Mediastinal	(0)	(1)	(0)	(0)	(0)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	(48)
Atrophy	2 [3.5]				1 [2.0]
Hyperplasia, Lymphocyte				1 [3.0]	
Spleen	(50)	(50)	(50)	(50)	(47)
Accessory Spleen	1	1			
Extramedullary Hematopoiesis	47 [2.3]	45 [2.3]	45 [2.2]	43 [2.2]	39 [2.1]
Hemorrhage					1 [4.0]
Pigment	38 [1.8]	38 [1.5]	42 [1.7]	40 [1.8]	36 [1.9]
White Pulp, Atrophy	5 [1.8]	5 [1.8]	2 [2.5]	6 [3.0]	7 [2.4]
White Pulp, Hyperplasia			1 [3.0]	1 [2.0]	
Thymus	(49)	(49)	(50)	(47)	(48)
Atrophy	47 [2.6]	45 [2.4]	47 [2.4]	45 [2.4]	42 [2.5]
Cyst			1		
Hyperplasia, Lymphocyte			1 [1.0]	1 [3.0]	1 [4.0]
Epithelial Cell, Hyperplasia		1 [2.0]			

#### **INTEGUMENTARY SYSTEM**

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)

Test Type: CHRONIC
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Species/Strain: RATS/HSD

Experiment Number: 10188 - 01

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

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female	
Mammary Gland	(50)	(50)	(50)	(50)	(50)	
Galactocele			3 [2.7]	3 [2.7]		
Hyperplasia	13 [2.7]	20 [2.1]	13 [2.4]	15 [2.9]	9 [1.8]	
Inflammation, Chronic	1 [2.0]					
Inflammation, Chronic Active	1 [4.0]					
Skin	(50)	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion		1				
Inflammation, Acute			1 [2.0]			
Inflammation, Chronic Active				1 [2.0]		
Ulcer				1 [3.0]		
MUSCULOSKELETAL SYSTEM						
Bone	(50)	(50)	(50)	(50)	(50)	
Osteopetrosis	(66)	(00)	1 [2.0]	1 [1.0]	(66)	
Cartilage, Joint, Degeneration		1 [1.0]	3 [1.0]	1 [1.0]		
Skeletal Muscle	(0)	(0)	(0)	(0)	(3)	
NERVOUS SYSTEM						
Brain	(50)	(50)	(50)	(50)	(50)	
Hemorrhage	(00)	(00)	2 [2.0]	1 [2.0]	1 [4.0]	
Hydrocephalus			_ []	1 [2.0]	. []	
Necrosis		1 [4.0]	1 [3.0]	1 [1.0]		
Peripheral Nerve	(0)	(0)	(0)	(0)	(1)	
Spinal Cord	(0)	(0)	(0)	(0)	(1)	
Hemorrhage	(-)	(-,	(-)	(-)	1 [3.0]	
RESPIRATORY SYSTEM						
Lung	(50)	(50)	(50)	(50)	(49)	
Infiltration Cellular, Histiocyte	47 [2.3]	45 [2.4]	46 [2.4]	49 [2.6]	48 [2.6]	
Inflammation, Granulomatous	6 [1.3]	11 [1.1]	18 [1.1]	7 [1.4]	10 [1.7]	
Inflammation, Chronic Active	16 [1.3]	[]	2 [1.0]	6 [1.2]	18 [1.3]	

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)

Test Type: CHRONIC
Route: DOSED FEED
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Experiment Number: 10188 - 01

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

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	
Pigment	1 [1.0]					
Thrombus	1 [1.0]					
Alveolar Epithelium, Hyperplasia	2 [2.0]	1 [1.0]	2 [1.0]	3 [2.3]		
Alveolus, Metaplasia, Squamous	1 [3.0]					
Nose	(50)	(50)	(50)	(50)	(50)	
Cyst, Squamous	1					
Foreign Body				1		
Inflammation, Acute				1 [1.0]		
Inflammation, Chronic Active	3 [1.3]	4 [1.0]	2 [1.0]	1 [1.0]		
Olfactory Epithelium, Accumulation, Hyaline Droplet	48 [1.6]	49 [2.6]	50 [2.5]	48 [2.2]	33 [1.1]	
Olfactory Epithelium, Metaplasia, Respiratory		2 [1.0]			1 [1.0]	
Respiratory Epithelium, Metaplasia, Squamous	2 [1.0]					
Trachea	(50)	(50)	(50)	(49)	(49)	
SPECIAL SENSES SYSTEM						
Eye	(50)	(50)	(50)	(49)	(50)	
Phthisis Bulbi					1	
Retinal Detachment			1 [1.0]			
Choroid, Hyperplasia			2 [1.0]			
Choroid, Inflammation, Chronic Active				1 [1.0]		
Cornea, Inflammation, Chronic Active	1 [1.0]			1 [2.0]		
Retina, Degeneration		2 [1.0]	1 [1.0]			
Retina, Dysplasia			1 [1.0]			
Harderian Gland	(50)	(50)	(50)	(49)	(49)	
Atrophy				1 [3.0]		
URINARY SYSTEM						
Kidney	(50)	(50)	(50)	(50)	(50)	
Atrophy				2 [2.5]		
Cyst			1			
Hydronephrosis				1 [4.0]		
Infarct	3 [1.0]				2 [1.5]	

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)

#### P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 12/17/2019 Experiment Number: 10188 - 01

AVERAGE SEVERITY GRADES[b]

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

Species/Strain: RATS/HSD

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
Inflammation, Chronic Active				1 [2.0]	
Mineral	1 [2.0]				
Nephropathy, Chronic Progressive	40 [1.1]	34 [1.2]	43 [1.4]	36 [1.4]	36 [1.0]
Polyarteritis Nodosa			1 [2.0]		
Pelvis, Dilation		1 [2.0]		2 [3.5]	3 [1.7]
Pelvis, Inflammation, Suppurative					1 [1.0]
Renal Tubule, Accumulation, Hyaline Droplet			1 [4.0]	1 [1.0]	
Renal Tubule, Cyst	1				
Renal Tubule, Hypertrophy					1 [3.0]
Ureter	(0)	(0)	(0)	(1)	(0)
Dilation				1 [2.0]	
Urinary Bladder	(50)	(50)	(49)	(50)	(47)
Inflammation, Chronic Active				1 [4.0]	

<sup>\*\*\*</sup> END OF REPORT \*\*\*

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)