Test Type: Chronic PN

Route: DOSED FEED

Species/Strain: RATS/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

F2_R2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

C Number: C99013

Lock Date: 03/27/2008

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 2.2.0

Route: DOSED FEED

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

Species/Strain: RATS/F 344/N

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM
Disposition Summary				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	9	8	7	4
Natural Death	5	3	4	2
Survivors				
Terminal Sacrifice	36	39	39	44
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Inflammation	1 [2.0]	. ,		. ,
Intestine Large, Cecum	(49)	(50)	(50)	(50)
Inflammation	1 [3.0]	·	•	•
Necrosis	1 [1.0]			
Intestine Large, Colon	(50)	(50)	(50)	(50)
Mineralization	1 [2.0]			
Parasite Metazoan	9	9	2	5
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Inflammation	1 [4.0]			
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 [2.0]	5 [1.0]	1 [1.0]	9 [1.1]
Basophilic Focus	27	29	25	34
Clear Cell Focus	25	25	27	33
Degeneration, Cystic	7 [1.3]	9 [1.3]	11 [1.2]	9 [1.1]
Eosinophilic Focus	17	19	22	33
Fatty Change, Diffuse	1 [2.0]	6 [1.5]	3 [2.3]	
Fibrosis	1 [1.0]	1 [1.0]	1 [1.0]	1 [1.0]
Hematopoietic Cell Proliferation	2 [1.0]	3 [1.0]	4 [1.0]	1 [1.0]
Hepatodiaphragmatic Nodule	4	5	3	2
Inflammation, Chronic Active	34 [1.0]	40 [1.1]	38 [1.1]	43 [1.0]

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)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer **CAS Number:** SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

ISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Mixed Cell Focus	6	19	12	20	
Necrosis	3 [1.7]	1 [2.0]	5 [1.6]	4 [1.5]	
Pigmentation, Hemosiderin	3 [1.3]	. [=.0]	1 [1.0]	. []	
Regeneration	- []	1 [2.0]	. []		
Bile Duct, Cyst	1 [1.0]	. [=.0]			
Bile Duct, Hyperplasia	41 [1.3]	46 [1.3]	42 [1.4]	48 [1.3]	
Bile Duct, Inflammation, Suppurative	[]	.0 [0]	.= []	1 [2.0]	
Mesentery	(3)	(5)	(7)	(4)	
Fat, Necrosis	3 [2.0]	4 [1.3]	5 [1.6]	4 [1.8]	
Oral Mucosa	(1)	(0)	(0)	(1)	
Hyperplasia	(1)	(0)	(0)	1 [4.0]	
Inflammation, Chronic Active				1 [4.0]	
Pharyngeal, Hyperplasia, Squamous	1 [3.0]			1 [4.0]	
Pancreas	(50)	(50)	(50)	(50)	
Inflammation	2 [2.5]	(30)	1 [3.0]	(30)	
Necrosis	2 [2.5]		1 [3.0]		
Acinus, Atrophy	19 [1.2]	33 [1.4]	26 [1.4]	28 [1.4]	
Acinus, Attopriy Acinus, Hyperplasia	19[1.2]	2 [2.5]	20 [1.4] 1 [1.0]	20 [1.4]	
Duct, Inflammation		2 [2.5]	1 [2.0]		
	(50)	(40)		(50)	
Salivary Glands	(50)	(49)	(50)	(50)	
Atrophy		1 [2.0]	4 [4 0]		
Fibrosis			1 [1.0]	4.54.03	
Duct, Cyst	(=0)	(50)	(50)	1 [4.0]	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Dysplasia	2 [1.5]			1 [1.0]	
Erosion		1 [1.0]			
Fibrosis				1 [2.0]	
Inflammation	6 [2.3]	4 [2.3]	2 [2.0]	2 [1.5]	
Mineralization	1 [2.0]				
Ulcer	6 [3.2]	2 [2.0]	2 [2.5]	1 [3.0]	
Epithelium, Hyperplasia	7 [2.1]	3 [2.0]	2 [1.5]	2 [2.0]	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Erosion	1 [1.0]	1 [2.0]	1 [3.0]	1 [2.0]	
Inflammation	1 [1.0]	1 [2.0]	3 [1.0]		
Mineralization	1 [4.0]				
Ulcer	4 [2.3]				

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 PN

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Tooth	(4)	(4)	(1)	(5)	
Malformation	3 [1.0]	4 [1.0]	1 [1.0]	5 [1.0]	
Pulp, Inflammation	1 [3.0]	. [0]	. [0]	G [o]	
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	
Inflammation	(/	(/	2 [1.0]	()	
Mineralization	1 [3.0]				
Thrombosis		1 [2.0]			
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	50 [2.3]	49 [2.3]	48 [2.3]	49 [2.1]	
Infiltration Cellular		1 [3.0]			
Artery, Hypertrophy		1 [3.0]			
Atrium, Thrombosis	1 [2.0]		1 [1.0]	1 [2.0]	
Epicardium, Inflammation			1 [1.0]		
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Degeneration, Cystic	,	, ,	1 [1.0]	2 [1.0]	
Hyperplasia	1 [1.0]	2 [1.0]	4 [1.0]	1 [1.0]	
Hypertrophy	2 [1.5]	1 [1.0]	2 [1.0]		
Necrosis	2 [1.5]		2 [2.0]		
Vacuolization Cytoplasmic	2 [3.0]	3 [3.0]	2 [3.0]	1 [3.0]	
Adrenal Medulla	(50)	(50)	(50)	(50)	
Hyperplasia	2 [1.0]	11 [3.0]	3 [1.0]	3 [2.7]	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Hyperplasia	1 [3.0]	1 [2.0]	1 [3.0]		
Parathyroid Gland	(35)	(49)	(49)	(37)	
Hyperplasia	2 [2.0]	·	·	·	
Pituitary Gland	(50)	(50)	(50)	(50)	
Pars Distalis, Angiectasis	• •	1 [2.0]			
Pars Distalis, Hyperplasia	17 [1.8]	25 [1.7]	13 [1.6]	13 [1.4]	
Thyroid Gland	(50)	(50)	(50)	(50)	

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 PN

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

Species/Strain. RATS/F 344/N				Lab. DAT		
FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM		
C-cell, Hyperplasia	14 [1.6]	14 [1.5]	13 [1.4]	14 [1.2]		
Follicle, Cyst	1 [1.0]			1 [1.0]		
Follicular Cell, Hypertrophy		1 [1.0]				
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(50)	(50)	(50)	(50)		
Inflammation	,	3 [1.7]	,	()		
Preputial Gland	(50)	(50)	(50)	(50)		
Hyperplasia	, ,	1 [1.0]	` ,	1 [2.0]		
Inflammation	1 [3.0]		1 [3.0]	1 [3.0]		
Duct, Ectasia				1 [4.0]		
Prostate	(50)	(50)	(50)	(50)		
Inflammation	37 [1.5]	29 [1.4]	22 [1.8]	18 [1.1]		
Epithelium, Hyperplasia	9 [1.6]	3 [1.7]	9 [1.4]	6 [1.0]		
Seminal Vesicle	(50)	(50)	(50)	(50)		
Testes	(50)	(50)	(50)	(50)		
Germinal Epithelium, Degeneration	5 [3.4]	3 [3.3]	4 [2.8]			
Interstitial Cell, Hyperplasia	12 [2.8]	4 [2.0]	8 [2.5]			
Rete Testes, Cyst		1 [4.0]				
HEMATOPOIETIC SYSTEM						
Bone Marrow	(50)	(50)	(50)	(50)		
Fibrosis	1 [1.0]	()	()	()		
Hyperplasia	24 [1.9]	24 [1.8]	24 [1.8]	37 [1.6]		
Inflammation		1 [1.0]				
Inflammation, Granulomatous		- •		3 [2.0]		
Myelofibrosis	1 [3.0]	1 [2.0]				
Necrosis			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)

Route: DOSED FEED

Species/Strain: RATS/F 344/N

Cyst Epithelial Inclusion

Epidermis, Hyperkeratosis

Fibrosis

Inflammation Ulcer

Cyst Epithelial Inclusion, Multifocal

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

2

1 [3.0]

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM	<u> </u>
Lymph Node	(7)	(5)	(3)	(3)	
Deep Cervical, Ectasia	1 [2.0]		1 [2.0]	. ,	
Mediastinal, Infiltration Cellular, Plasma Cell		1 [2.0]	1 [2.0]		
Pancreatic, Inflammation	1 [2.0]			1 [1.0]	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Atrophy				1 [3.0]	
Ectasia	1 [2.0]	1 [3.0]			
Hyperplasia, Histiocytic	1 [1.0]				
Spleen	(50)	(50)	(50)	(50)	
Accessory Spleen				1	
Hematopoietic Cell Proliferation	4 [1.8]	6 [2.0]	4 [2.8]	3 [2.0]	
Hyperplasia, Histiocytic	1 [4.0]	1 [2.0]	6 [2.2]	2 [3.0]	
Hyperplasia, Lymphoid	2 [2.5]	1 [2.0]	4 [2.3]	3 [2.0]	
Necrosis	1 [3.0]		1 [2.0]		
Pigmentation, Hemosiderin	8 [1.1]	4 [1.0]	4 [1.3]	5 [1.0]	
Lymphoid Follicle, Atrophy	3 [2.7]	1 [4.0]	1 [2.0]	1 [4.0]	
Thymus	(48)	(50)	(50)	(50)	
Atrophy	44 [3.1]	46 [3.2]	47 [3.3]	49 [3.2]	
Hyperplasia, Lymphoid		1 [2.0]			
Necrosis	1 [4.0]		1 [2.0]	1 [3.0]	
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Fibrosis	2 [2.0]	1 [2.0]			
Hyperplasia	1 [1.0]	1 [2.0]	3 [1.7]	3 [1.3]	
Skin	(50)	(50)	(50)	(50)	

1 [2.0] 1 [2.0]

2 [3.0]

1 [3.0]

1 [1.0]

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 PN

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Hypertrophy	(00)	1 [2.0]	(00)	(65)	
Osteopetrosis	1 [2.0]	. [2.0]			
Skeletal Muscle	(1)	(1)	(0)	(0)	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Demyelination	2 [1.0]	(- /	\ -/	,	
Gliosis, Focal				1 [2.0]	
Hemorrhage	5 [1.0]	3 [2.7]	3 [2.3]	1 [3.0]	
Infiltration Cellular, Mononuclear Cell				1 [1.0]	
Mineralization	1 [1.0]	1 [1.0]			
Necrosis		1 [2.0]	1 [1.0]		
Spinal Cord	(1)	(0)	(0)	(1)	
Meninges, Infiltration Cellular, Mononuclear Cell	1 [1.0]	<i>、,</i>	, <i>,</i>		
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Atelectasis			1		
Fibrosis		1 [2.0]		1 [1.0]	
Inflammation, Chronic Active	7 [1.6]	4 [1.3]	4 [1.0]	2 [2.0]	
Mineralization	1 [3.0]				
Thrombosis		1 [1.0]			
Alveolar Epithelium, Hyperplasia	13 [1.3]	11 [1.3]	5 [1.8]	7 [1.4]	
Alveolar Epithelium, Metaplasia, Squamous				1 [1.0]	
Alveolus, Infiltration Cellular, Histiocyte	2 [1.5]	5 [1.6]	4 [1.0]	2 [1.0]	
Nose	(50)	(50)	(50)	(50)	
Foreign Body		2			
Inflammation	24 [1.3]	19 [1.9]	20 [1.4]	19 [1.4]	
Olfactory Epithelium, Metaplasia				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: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

Test Type: Chronic PN
Route: DOSED FEED
Species/Strain: RATS/F 344/N

Opcoics/ottain: 10/110/1 0-1-1/11						
FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM		
Olfactory Epithelium, Necrosis Respiratory Epithelium, Hyperplasia Respiratory Epithelium, Necrosis	1 [1.0]	1 [2.0] 1 [3.0] 1 [3.0]	1 [2.0]	5 [1.4]		
SPECIAL SENSES SYSTEM						
Eye Cornea, Inflammation	(50) 1 [1.0]	(50)	(50)	(50)		
Lens, Cataract	1 [2.0]	2 [3.5]	1 [4.0]			
Retina, Degeneration	3 [2.0]	3 [3.0]	1 [4.0]	2 [2.5]		
Retina, Gliosis	2 [2.0]					
Harderian Gland	(50)	(50)	(50)	(50)		
Degeneration				1 [3.0]		
Hyperplasia	1 [2.0]	2 [1.5]				
Zymbal's Gland	(1)	(0)	(1)	(0)		
URINARY SYSTEM						
Kidney	(50)	(50)	(50)	(50)		
Accumulation, Hyaline Droplet	3 [1.3]	1 [4.0]	,	()		
Infarct	1 [1.0]	2 [1.0]		1 [1.0]		
Mineralization	1 [4.0]					
Nephropathy	47 [2.2]	50 [2.4]	48 [2.4]	49 [2.2]		
Cortex, Cyst			1 [2.0]			
Papilla, Necrosis	1 [3.0]					
Pelvis, Dilatation	1 [4.0]					
Pelvis, Inflammation		1 [2.0]	2 [1.5]			
Pelvis, Transitional Epithelium, Hyperplasia	1 [1.0]		1 [1.0]	1 [1.0]		
Renal Tubule, Dilatation	1 [3.0]					
Renal Tubule, Necrosis	1 [2.0]					
Urinary Bladder	(50)	(50)	(50)	(50)		
Inflammation			2 [2.0]			
Necrosis			1 [3.0]			
Transitional Epithelium, Hyperplasia		1 [1.0]				

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 PN

Route: DOSED FEED

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35

First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS MALE

Species/Strain: RATS/F 344/N

0 PPM

400 PPM

800 PPM

1600 PPM

*** END OF MALE ***

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer **CAS Number:** SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM
Disposition Summary				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	4	10	6	3
Natural Death	5	2	7	1
Survivors				
Terminal Sacrifice	41	38	37	46
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Hemorrhage				1 [3.0]
Intestine Large, Colon	(50)	(50)	(50)	(50)
Parasite Metazoan	5	5	1	4
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	5 [1.8]	5 [1.4]	3 [1.0]	5 [2.2]
Basophilic Focus	45	46	43	45
Clear Cell Focus	9	5	9	6
Degeneration, Cystic		1 [2.0]	1 [1.0]	
Eosinophilic Focus	23	31	30	29
Fatty Change, Diffuse	3 [2.0]	4 [2.0]	3 [2.0]	1 [4.0]
Fibrosis	1 [1.0]			
Hematopoietic Cell Proliferation	3 [1.0]	3 [1.0]	2 [1.0]	
Hepatodiaphragmatic Nodule	4	5	5	11
Inflammation, Chronic Active	41 [1.0]	45 [1.0]	43 [1.0]	47 [1.0]
Mixed Cell Focus	4	8	7	13
Necrosis	2 [2.0]	1 [1.0]	3 [1.3]	1 [2.0]
Tension Lipidosis		1 [1.0]	1 [2.0]	
Bile Duct, Cyst				3 [2.0]
Bile Duct, Hyperplasia	12 [1.1]	19 [1.1]	20 [1.1]	20 [1.1]
Oval Cell, Hyperplasia	1 [2.0]			1 [1.0]
Mesentery	(11)	(7)	(11)	(4)

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 PN

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Fat, Necrosis	11 [1.8]	6 [1.8]	11 [1.5]	4 [1.5]	
Oral Mucosa	(2)	(0)	(0)	(1)	
Cyst	1 [2.0]	(0)	(0)	(-)	
Hyperplasia	. [=]			1 [4.0]	
Inflammation	1 [2.0]			. []	
Pancreas	(50)	(50)	(50)	(50)	
Inflammation	(55)	1 [2.0]	(00)	(00)	
Metaplasia, Hepatocyte		1 [1.0]	1 [1.0]		
Acinus, Atrophy	16 [1.1]	11 [1.3]	17 [1.2]	23 [1.2]	
Acinus, Hyperplasia	1 [1.0]	11[1.0]	[=]	20 [2]	
Duct, Cyst	. [5]		1 [3.0]		
Salivary Glands	(50)	(50)	(50)	(50)	
Atrophy	1 [2.0]	(00)	(30)	(50)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Inflammation	3 [3.0]	2 [3.0]	3 [3.7]	1 [1.0]	
Ulcer	2 [2.5]	1 [3.0]	3 [3.3]	1 [1.0]	
Epithelium, Hyperplasia	3 [2.7]	4 [1.8]	3 [2.0]		
Stomach, Glandular	(50)	(50)	(50)	(50)	
Erosion	1 [2.0]	(30)	(30)	(30)	
Inflammation	1 [2.0]				
Ulcer	1 [2.0]	1 [1.0]			
Tongue	(0)	(0)	(1)	(0)	
Inflammation	(0)	(0)	1 [2.0]	(0)	
Tooth	(5)	(5)	(3)	(1)	
Malformation					
Manormanon	5 [1.0]	5 [1.0]	3 [1.0]	1 [1.0]	
CARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	47 [1.7]	49 [1.8]	46 [1.8]	48 [1.6]	
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Atrophy			1 [3.0]	1 [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)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

Test Type: Chronic PN **Route:** DOSED FEED

Species/Strain: RATS/F 344/N

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Degeneration, Cystic	6 [1.2]	9 [1.6]	1 [2.0]	1 [1.0]	
Hyperplasia	14 [1.2]	9 [1.2]	3 [1.0]	3 [1.7]	
Hypertrophy	1 [1.0]		1 [1.0]	3 [2.0]	
Necrosis		1 [1.0]		1 [2.0]	
Thrombosis		1 [1.0]			
Vacuolization Cytoplasmic	1 [3.0]	3 [2.0]	1 [3.0]	2 [3.0]	
Adrenal Medulla	(50)	(50)	(50)	(50)	
Hyperplasia	3 [1.3]		1 [2.0]	1 [1.0]	
Necrosis	1 [1.0]				
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Pituitary Gland	(50)	(50)	(50)	(50)	
Cyst	1 [1.0]	2 [1.0]	3 [1.7]	4 [2.0]	
Pars Distalis, Angiectasis	1 [2.0]	1 [4.0]		1 [2.0]	
Pars Distalis, Hyperplasia	24 [2.0]	21 [2.2]	21 [2.4]	24 [1.9]	
Thyroid Gland	(50)	(50)	(50)	(50)	
C-cell, Hyperplasia	25 [1.6]	27 [1.6]	26 [1.6]	17 [1.2]	

GENERAL BODY SYSTEM

None

GENITAL SYSTEM				
Clitoral Gland	(50)	(50)	(50)	(50)
Hyperplasia		4 [3.0]	1 [3.0]	1 [3.0]
Duct, Cyst		1 [4.0]		
Ovary	(50)	(50)	(50)	(50)
Atrophy	4 [2.3]	2 [1.5]	3 [2.7]	2 [1.0]
Cyst	3 [3.3]	6 [3.2]	6 [3.3]	4 [2.0]
Oviduct	(1)	(0)	(0)	(0)
Cyst	1 [3.0]			
Uterus	(50)	(50)	(50)	(50)
Decidual Reaction			1 [2.0]	
Hemorrhage		1 [2.0]		
Inflammation		4 [3.5]	1 [3.0]	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)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer CAS Number: SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Metaplasia, Squamous		4 [2.5]			
Cervix, Cyst		4 [2.0]	1 [3.0]	1 [2.0]	
Endometrium, Hyperplasia, Adenomatous			1 [5.0]	1 [2.0]	
Endometrium, Hyperplasia, Patriorinatous Endometrium, Hyperplasia, Cystic	2 [1.0]	7 [1.1]	5 [1.6]	3 [2.0]	
Venule, Hyperplasia	2 [1.0]	1 [2.0]	0 [1.0]	0 [2.0]	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Atrophy			1 [2.0]		
Hyperplasia	16 [1.8]	25 [1.8]	25 [2.0]	38 [1.5]	
Inflammation				1 [2.0]	
Inflammation, Granulomatous			6 [1.2]	2 [1.5]	
Myelofibrosis	1 [2.0]	2 [3.5]		1 [2.0]	
Lymph Node	(2)	(1)	(1)	(2)	
Deep Cervical, Ectasia			1 [3.0]		
Deep Cervical, Infiltration Cellular, Histiocyte				1 [1.0]	
Mediastinal, Hyperplasia, Lymphoid	1 [2.0]			1 [2.0]	
Lymph Node, Mandibular	(0)	(1)	(0)	(0)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Atrophy		1 [2.0]	2 [3.5]		
Hyperplasia, Lymphoid			1 [2.0]	1 [3.0]	
Spleen	(50)	(50)	(50)	(50)	
Accessory Spleen		1			
Hematopoietic Cell Proliferation	1 [3.0]	8 [1.3]	7 [1.1]	3 [1.7]	
Hyperplasia, Histiocytic	2 [3.5]	1 [4.0]	1 [3.0]	1 [3.0]	
Hyperplasia, Lymphoid		2 [2.0]			
Infarct				1 [2.0]	
Necrosis		1 [2.0]			
Pigmentation, Hemosiderin	43 [1.1]	47 [1.0]	42 [1.2]	38 [1.1]	
Lymphoid Follicle, Atrophy		1 [2.0]	3 [4.0]	1 [4.0]	
Thymus	(50)	(50)	(50)	(50)	
Atrophy	46 [3.0]	46 [3.0]	50 [3.1]	49 [3.0]	
Hyperplasia, Lymphoid		1 [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 PN

Route: DOSED FEED

Species/Strain: RATS/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer **CAS Number: SANTRIMER2**

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
INTEGUMENTARY SYSTEM					
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Galactocele	1 [4.0]				
Hyperplasia	2 [2.0]	1 [3.0]			
Inflammation	2 [4.0]				
Skin	(50)	(50)	(50)	(50)	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Fracture	(3-7)	(==)	()	1	
Osteopetrosis	1 [3.0]			1 [2.0]	
Skeletal Muscle	(0)	(0)	(2)	(0)	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Gliosis, Focal	1 [1.0]	,	,	,	
Hemorrhage	2 [1.0]	1 [3.0]	3 [2.0]	1 [2.0]	
Infiltration Cellular, Mononuclear Cell	1 [1.0]				
Mineralization	2 [1.0]				
Necrosis		2 [2.0]	1 [3.0]		
Pigmentation, Focal	1 [1.0]				
Neuron, Depletion Cellular	1 [1.0]				
White Matter, Vacuolization Cytoplasmic	1 [1.0]				
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Atelectasis	1				
			1 [4.0]		
Congestion			ı [-1 .0]		
Congestion Foreign Body		1	i [+ .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)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer **CAS Number:** SANTRIMER2

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
				4.14.03	
Necrosis	45 [4 4]	40 [4 0]	0 [4 6]	1 [1.0]	
Alveolar Epithelium, Hyperplasia	15 [1.1]	13 [1.3]	9 [1.6]	15 [1.1]	
Alveolar Epithelium, Metaplasia, Squamous	40 [4 0]	40 [4 4]	44 [4 0]	2 [1.0]	
Alveolus, Infiltration Cellular, Histiocyte	16 [1.0]	12 [1.1]	11 [1.0]	13 [1.0]	
Nose	(50)	(50)	(50)	(50)	
Foreign Body		2			
Inflammation	8 [1.3]	11 [1.4]	6 [1.2]	9 [1.0]	
Thrombosis	1 [3.0]				
Glands, Respiratory Epithelium, Hyperplasia				1 [3.0]	
Respiratory Epithelium, Hyperplasia				1 [1.0]	
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Cornea, Inflammation	(00)	(00)	(00)	1 [2.0]	
Lens, Cataract	1 [2.0]	2 [3.0]	2 [2.5]	5 [2.6]	
Retina, Degeneration	2 [3.0]	3 [2.0]	2 [3.0]	3 [4.0]	
Retina, Gliosis	2 [0.0]	1 [1.0]	1 [2.0]	4 [1.5]	
Zymbal's Gland	(0)	(1)	(0)	(0)	
Zymbars Gianu	(0)	(1)	(0)	(0)	
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	
Accumulation, Hyaline Droplet	1 [2.0]	1 [3.0]	(00)	(55)	
Infarct	3 [2.3]	2 [1.5]	1 [3.0]	2 [1.5]	
Infiltration Cellular, Lymphoid	0 [2.0]	2[0]	. [0.0]	1 [3.0]	
Inflammation, Chronic Active				1 [3.0]	
Nephropathy	41 [1.2]	42 [1.3]	40 [1.1]	45 [1.2]	
Papilla, Necrosis	1 [2.0]	2 [1.5]	40 [1.1]	1 [1.0]	
Pelvis, Dilatation	۱ رح.۰۰	[۱۰۰]		1 [2.0]	
Pelvis, Inflammation	2 [2.0]	1 [1.0]	2 [2.0]	ا رکان	
Pelvis, Transitional Epithelium, Hyperplasia		1 [1.0]		1 [1 0]	
	1 [2.0]		2 [1.0]	1 [1.0]	
Renal Tubule, Dilatation	1 [3.0]	(50)	1 [2.0]	(50)	
Urinary Bladder	(50)	(50)	(50)	(50)	
Infiltration Cellular, Histiocyte				1 [2.0]	

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Test Type: Chronic PN

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 09/23/2010 AVERAGE SEVERITY GRADES[b]

Styrene-acrylonitrile trimer **CAS Number: SANTRIMER2**

Time Report Requested: 12:12:35 First Dose M/F: 05/12/05 / 05/13/05

Lab: BAT

Route: DOSED FEED Species/Strain: RATS/F 344/N

SCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM	
Inflammation, Chronic Active Transitional Epithelium, Hyperplasia	1 [1.0] 1 [1.0]		1 [1.0]	12 [2.3]	
Transitional Epithelium, Metaplasia, Squamous				1 [2.0]	

*** END OF REPORT ***