

Experiment Number: 88148-05

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/HSD

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

Test Compound: 3,3',4,4'-Tetrachloroazobenzene

CAS Number: 14047-09-7

Date Report Requested: 10/20/2014

Time Report Requested: 07:49:12

First Dose M/F: NA / NA

Lab: BAT

C Number:	C88148B
Lock Date:	10/02/2001
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

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Route: GAVAGE

CAS Number: 14047-09-7

First Dose M/F: NA / NA

Species/Strain: Rat/HSD

Lab: BAT

HSD Rat MALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(0)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Bile Duct, Hyperplasia	5 (50%)	6 (60%)	6 (60%)	9 (90%)	9 (90%)	8 (80%)
Clear Cell Focus		1 (10%)	3 (30%)	1 (10%)	1 (10%)	
Fatty Change					6 (60%)	8 (80%)
Hematopoietic Cell Proliferation	2 (20%)	2 (20%)	2 (20%)	2 (20%)	9 (90%)	10 (100%)
Hepatocyte, Hypertrophy			2 (20%)	5 (50%)	7 (70%)	10 (100%)
Infiltration Cellular, Mixed Cell	8 (80%)	8 (80%)	9 (90%)	10 (100%)	10 (100%)	10 (100%)
Necrosis	1 (10%)	2 (20%)	2 (20%)	1 (10%)	1 (10%)	2 (20%)
Vacuolization Cytoplasmic, Focal			1 (10%)			
Pancreas	(10)	(0)	(0)	(0)	(0)	(0)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(0)
Hyperplasia, Squamous						
Tongue	(10)	(0)	(0)	(0)	(0)	(0)
CARDIOVASCULAR SYSTEM						
None						
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(0)
Hypertrophy	2 (20%)					
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(0)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(0)

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

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HSD Rat MALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
Cyst	3 (30%)					
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(0)
Ultimobranchial Cyst	5 (50%)					
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
None						
HEMATOPOIETIC SYSTEM						
Spleen	(10)	(10)	(10)	(10)	(10)	(10)
Hematopoietic Cell Proliferation	2 (20%)		2 (20%)	3 (30%)	4 (40%)	9 (90%)
Infiltration Cellular, Polymorphnuclr				1 (10%)		
Thymus	(9)	(10)	(10)	(10)	(10)	(10)
Atrophy	1 (11%)	1 (10%)	3 (30%)	1 (10%)	4 (40%)	7 (70%)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(0)
Skin	(10)	(0)	(0)	(0)	(0)	(0)
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
None						
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(9)	(10)	(10)	(10)
Alveolar Epith, Metaplasia, Bronchiolar	2 (20%)		3 (33%)	3 (30%)	3 (30%)	8 (80%)
Alveolus, Hyperplasia, Focal						1 (10%)
Alveolus, Infiltration Cellular, Histiocyte	1 (10%)					
Infiltration Cellular, Histiocyte			3 (33%)	2 (20%)	1 (10%)	3 (30%)
Inflammation, Granulomatous, Focal				1 (10%)		

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

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First Dose M/F: NA / NA

Lab: BAT

HSD Rat MALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
Interstitial, Infiltration Cellular, Mononuclear Cl Mineralization	1 (10%)	3 (30%)	3 (33%)	5 (50%)	5 (50%)	9 (90%)
Nose	(10)	(0)	(0)	(0)	(0)	(0)
Nerve, Degeneration	3 (30%)					
Respirat Epith, Hyperplasia	1 (10%)					
Respirat Epith, Inflammation	1 (10%)					
Squam Epithel, Inflammation	4 (40%)					
SPECIAL SENSES SYSTEM						
None						
URINARY SYSTEM						
None						

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Time Report Requested: 07:49:12

First Dose M/F: NA / NA

Lab: BAT

HSD Rat MALE	30.0 MG/KG	100.00 MG/KG
Disposition Summary		
Animals Initially In Study	10	10
Early Deaths		
Survivors		
Terminal Sacrifice	10	10
Animals Examined Microscopically	10	10
ALIMENTARY SYSTEM		
Intestine Small, Duodenum	(0)	(10)
Liver	(10)	(10)
Bile Duct, Hyperplasia	7 (70%)	5 (50%)
Clear Cell Focus		
Fatty Change	10 (100%)	9 (90%)
Hematopoietic Cell Proliferation	10 (100%)	10 (100%)
Hepatocyte, Hypertrophy	10 (100%)	9 (90%)
Infiltration Cellular, Mixed Cell	10 (100%)	9 (90%)
Necrosis		
Vacuolization Cytoplasmic, Focal		
Pancreas	(0)	(10)
Stomach, Forestomach	(0)	(10)
Hyperplasia, Squamous		1 (10%)
Tongue	(0)	(10)
CARDIOVASCULAR SYSTEM		
None		
ENDOCRINE SYSTEM		
Adrenal Cortex	(0)	(10)
Hypertrophy		1 (10%)
Adrenal Medulla	(0)	(10)
Pituitary Gland	(0)	(10)

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Lab: BAT

HSD Rat MALE	30.0 MG/KG	100.00 MG/KG
Cyst		
Thyroid Gland	(0)	(10)
Ultimobranchial Cyst		3 (30%)
GENERAL BODY SYSTEM		
None		
GENITAL SYSTEM		
None		
HEMATOPOIETIC SYSTEM		
Spleen	(10)	(9)
Hematopoietic Cell Proliferation	10 (100%)	8 (89%)
Infiltration Cellular, Polymorphnuclr		
Thymus	(10)	(8)
Atrophy	10 (100%)	6 (75%)
INTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(10)
Skin	(0)	(10)
MUSCULOSKELETAL SYSTEM		
None		
NERVOUS SYSTEM		
None		
RESPIRATORY SYSTEM		
Lung	(10)	(10)
Alveolar Epith, Metaplasia, Bronchiolar	8 (80%)	10 (100%)
Alveolus, Hyperplasia, Focal		
Alveolus, Infiltration Cellular, Histiocyte		
Infiltration Cellular, Histiocyte		
Inflammation, Granulomatous, Focal		

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First Dose M/F: NA / NA

Lab: BAT

HSD Rat MALE	30.0 MG/KG	100.00 MG/KG
Interstitial, Infiltration Cellular, Mononuclear Cl	10 (100%)	10 (100%)
Mineralization	2 (20%)	
Nose	(0)	(10)
Nerve, Degeneration		1 (10%)
Respirat Epith, Hyperplasia		
Respirat Epith, Inflammation		1 (10%)
Squam Epithel, Inflammation		3 (30%)

SPECIAL SENSES SYSTEM

None

URINARY SYSTEM

None

END OF MALE DATA

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Time Report Requested: 07:49:12

Route: GAVAGE

CAS Number: 14047-09-7

First Dose M/F: NA / NA

Species/Strain: Rat/HSD

Lab: BAT

HSD Rat FEMALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(0)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Bile Duct, Hyperplasia	4 (40%)	10 (100%)	9 (90%)	10 (100%)	8 (80%)	10 (100%)
Clear Cell Focus		1 (10%)				2 (20%)
Hematopoietic Cell Proliferation	2 (20%)	3 (30%)	2 (20%)	3 (30%)	3 (30%)	9 (90%)
Hepatocyte, Hypertrophy					1 (10%)	6 (60%)
Infiltration Cellular, Mixed Cell	10 (100%)	9 (90%)	10 (100%)	10 (100%)	8 (80%)	10 (100%)
Mixed Cell Focus						
Necrosis		1 (10%)		1 (10%)		
Oral Mucosa	(0)	(0)	(0)	(0)	(0)	(0)
Gingival, Inflammation						
Pancreas	(10)	(0)	(0)	(0)	(0)	(0)
Acinus, Atrophy						
Acinus, Inflammation						
Basophilic Focus						
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(0)
Diverticulum	1 (10%)					
Epithelium, Hyperplasia, Focal	1 (10%)					
Tongue	(10)	(0)	(0)	(0)	(0)	(0)

CARDIOVASCULAR SYSTEM

None

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Species/Strain: Rat/HSD

Lab: BAT

HSD Rat FEMALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(2)	(0)	(0)	(0)
Hyperplasia						
Hypertrophy	2 (20%)					
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(0)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(0)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(0)
Ultimobranchial Cyst	2 (20%)					
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Ovary	(10)	(0)	(0)	(0)	(0)	(0)
Uterus	(10)	(0)	(1)	(0)	(0)	(0)
Atrophy			1 (100%)			
Endometrium, Hyperplasia, Cystic	1 (10%)					
Vagina	(10)	(0)	(0)	(0)	(0)	(0)
HEMATOPOIETIC SYSTEM						
Spleen	(10)	(2)	(2)	(2)	(2)	(10)
Fibrosis						
Hematopoietic Cell Proliferation	3 (30%)	2 (100%)	2 (100%)	2 (100%)	1 (50%)	5 (50%)
Pigmentation, Hemosiderin			1 (50%)		1 (50%)	4 (40%)
Thymus	(10)	(10)	(10)	(10)	(10)	(10)
Atrophy		2 (20%)	8 (80%)	7 (70%)	6 (60%)	8 (80%)
Cyst					1 (10%)	1 (10%)
Hyperplasia, Squamous						
INTEGUMENTARY SYSTEM						
Mammary Gland	(9)	(0)	(0)	(0)	(0)	(0)
Skin	(10)	(0)	(0)	(0)	(0)	(0)

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Species/Strain: Rat/HSD

Lab: BAT

HSD Rat FEMALE	0 MG/KG	0.1 MG/KG	0.3 MG/KG	1.0 MG/KG	3.0 MG/KG	10.0 MG/KG
Subcut Tiss, Inflammation, Suppurative	1 (10%)					
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
None						
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(10)	(10)	(10)	(9)
Alveolar Epith, Metaplasia, Bronchiolar Fibrosis, Focal	1 (10%)	2 (20%)		1 (10%)		
Infiltration Cellular, Histiocyte		2 (20%)	3 (30%)	1 (10%)	1 (10%)	
Infiltration Cellular, Mononuclear Cl						
Interstitial, Infiltration Cellular, Mononuclear Cl		1 (10%)	2 (20%)	2 (20%)	2 (20%)	
Perivascular, Infiltration Cellular, Polymorphnuclr	1 (10%)					
Nose	(10)	(0)	(0)	(0)	(0)	(0)
Nerve, Degeneration	3 (30%)					
Squam Epithel, Inflammation	1 (10%)					
SPECIAL SENSES SYSTEM						
Eye	(0)	(1)	(0)	(0)	(2)	(1)
Hemorrhage					1 (50%)	
Inflammation, Chronic Active		1 (100%)			1 (50%)	1 (100%)
URINARY SYSTEM						
None						

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Lab: BAT

HSD Rat FEMALE	30.0 MG/KG	100.0 MG/KG
Disposition Summary		
Animals Initially In Study	10	10
Early Deaths		
Survivors		
Terminal Sacrifice	10	10
Animals Examined Microscopically	10	10

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(0)	(10)
Liver	(10)	(10)
Bile Duct, Hyperplasia	7 (70%)	5 (50%)
Clear Cell Focus		2 (20%)
Hematopoietic Cell Proliferation	10 (100%)	10 (100%)
Hepatocyte, Hypertrophy	6 (60%)	5 (50%)
Infiltration Cellular, Mixed Cell	10 (100%)	9 (90%)
Mixed Cell Focus	1 (10%)	
Necrosis		
Oral Mucosa	(0)	(2)
Gingival, Inflammation		2 (100%)
Pancreas	(0)	(10)
Acinus, Atrophy		2 (20%)
Acinus, Inflammation		1 (10%)
Basophilic Focus		1 (10%)
Stomach, Forestomach	(0)	(10)
Diverticulum		
Epithelium, Hyperplasia, Focal		
Tongue	(0)	(10)

CARDIOVASCULAR SYSTEM

None

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First Dose M/F: NA / NA

Lab: BAT

HSD Rat FEMALE	30.0 MG/KG	100.0 MG/KG
ENDOCRINE SYSTEM		
Adrenal Cortex	(1)	(10)
Hyperplasia		1 (10%)
Hypertrophy		
Adrenal Medulla	(0)	(10)
Pituitary Gland	(0)	(10)
Thyroid Gland	(0)	(10)
Ultimobranchial Cyst		2 (20%)
GENERAL BODY SYSTEM		
None		
GENITAL SYSTEM		
Ovary	(0)	(10)
Uterus	(0)	(10)
Atrophy		
Endometrium, Hyperplasia, Cystic		
Vagina	(0)	(10)
HEMATOPOIETIC SYSTEM		
Spleen	(10)	(10)
Fibrosis		1 (10%)
Hematopoietic Cell Proliferation	2 (20%)	
Pigmentation, Hemosiderin	7 (70%)	7 (70%)
Thymus	(10)	(10)
Atrophy	9 (90%)	7 (70%)
Cyst	1 (10%)	
Hyperplasia, Squamous	1 (10%)	
INTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(10)
Skin	(0)	(10)

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HSD Rat FEMALE	30.0 MG/KG	100.0 MG/KG
Subcut Tiss, Inflammation, Suppurative		
MUSCULOSKELETAL SYSTEM		
None		
NERVOUS SYSTEM		
None		
RESPIRATORY SYSTEM		
Lung	(9)	(10)
Alveolar Epith, Metaplasia, Bronchiolar Fibrosis, Focal	3 (33%)	3 (30%)
Infiltration Cellular, Histiocyte		4 (40%)
Infiltration Cellular, Mononuclear CI		1 (10%)
Interstitial, Infiltration Cellular, Mononuclear CI	2 (22%)	6 (60%)
Perivascular, Infiltration Cellular, Polymorphnuclr		
Nose	(0)	(10)
Nerve, Degeneration		2 (20%)
Squam Epithel, Inflammation		4 (40%)
SPECIAL SENSES SYSTEM		
Eye	(0)	(0)
Hemorrhage		
Inflammation, Chronic Active		
URINARY SYSTEM		
None		

** END OF REPORT **

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