

Experiment Number: 20320 - 03
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Tetrabromobisphenol A
CAS Number: 79-94-7

Date Report Requested: 01/23/2013
Time Report Requested: 15:06:23
First Dose M/F: 07/25/07 / 07/26/07
Lab: BAT

F1_Rev.1_RE

NTP Study Number:	C20320		
Lock Date:	03/24/2011		
Cage Range:	ALL		
Date Range:	ALL		
Reasons For Removal:	25021 TSAC	25020 NATD	25019 MSAC
	25018 DACC		
Removal Date Range:	ALL		
Treatment Groups:	Include ALL		
Study Gender:	Both		
TDMSE Version:	3.0.1.0_004		
PWG Approval Date:	NONE		

Wistar Han Rats Male 0 mg/kg	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

males
(cont...)

ALIMENTARY SYSTEM

Esophagus Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum Parasite Metazoan Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver Angiectasis	2																									
Basophilic Focus		X					X			X			X			X			X			X				
Clear Cell Focus	X	X	X				X	X		X		X		X			X		X	X		X	X	X		
Fatty Change	1	1		2	2	1	1	1		1		1				1		1	1	1		1	2	1		
Hepatodiaphragmatic Nodule																		X								
Mixed Cell Focus					X							X														X
Necrosis						2																				
Bile Duct, Hyperplasia																						1				
Mesentery	+				+																	+				

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

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Wistar Han Rats Male	DAY ON TEST																								males (cont...)
	0648	0727	0776	0666	0555	0577	0070	0777	0777	0171	0777	0665	0577	0272	0444	0272	0777	0777	0777	0777	0777	0777	0777		
0 mg/kg	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
ANIMAL ID	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
	3467	8	8	8	9	0	1	2	3	4	5	6	8	9	1	2	3	4	6	7	8	9	0	1	

Inflammation, Chronic Fat, Necrosis 2 2 4

Pancreas Atrophy Necrosis Acinus, Hyperplasia + 3

Salivary Glands +

Stomach, Forestomach Inflammation, Chronic Mineralization Necrosis Ulcer + 1 2 1 3 4 3

Stomach, Glandular Inflammation, Chronic Necrosis Ulcer + 4 4 2

CARDIOVASCULAR SYSTEM

Blood Vessel Adventitia, Aorta, Hemorrhage Aorta, Inflammation, Chronic + 3 3

Heart Cardiomyopathy Atrium, Epicardium, Inflammation, Chronic Endocardium, Hyperplasia + 2 1 1 1 2 2 1 2 1 1 1 1 1 1 1 2 1 1 2 2 3

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

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Lab: BAT

WISTAR HAN RATS MALE 0 mg/kg	DAY ON TEST																							males (cont...)
	0 6 4 8	0 7 2 7	0 7 2 7	0 6 2 2	0 6 3 8	0 5 1 7	0 5 8 7	0 7 2 8	0 0 2 2	0 7 2 9	0 7 2 9	0 7 2 9	0 1 9 6	0 7 2 7	0 6 8 3	0 5 2 8	0 7 4 1	0 2 2 9	0 7 2 7	0 7 2 7	0 7 2 7	0 7 2 7		
ANIMAL ID	0 0 0 0 3	0 0 0 0 4	0 0 0 0 6	0 0 0 0 7	0 0 0 0 8	0 0 0 0 9	0 0 0 0 0	0 0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	0 0 0 0 6	0 0 0 0 8	0 0 0 0 9	0 0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 6	0 0 0 0 7	0 0 0 0 8	0 0 0 0 9	0 0 0 0 0

Epicardium, Fibrosis

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Degeneration, Cystic						4																	
Hyperplasia		2			2	4				2				1							1	1	
Vacuolization Cytoplasmic				1				2	2								1	2			2		
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																		1				1	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																							
Parathyroid Gland	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																							
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																							
Pars Distalis, Hyperplasia											1							2	2		2	2	
Pars Intermedia, Hyperplasia								2															
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																							
C-cell, Hyperplasia		1	1																			1	1
Follicle, Hyperplasia										2				1									

GENERAL BODY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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		DAY ON TEST																				males (cont...)	
WISTAR HAN RATS MALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
0 mg/kg		6	7	7	6	6	5	5	7	0	7	7	7	1	7	6	5	7	2	2	7		7
	ANIMAL ID	4	2	2	2	3	1	8	2	0	2	2	2	9	2	8	3	2	4	2	2	2	
		8	7	7	2	8	7	7	8	2	9	9	9	6	7	7	3	8	1	9	7	7	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
		3	4	6	7	8	9	0	1	2	3	4	5	6	8	9	1	2	3	4	6	7	

GENITAL SYSTEM

Epididymis Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Preputial Gland Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Prostate Hyperplasia Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Artery, Inflammation	2			1	2									1	1						1	
Seminal Vesicle Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Testes Edema	1	2		1	1			2		1	1	1		2		1		3		2	2	3

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node Mediastinal, Hyperplasia, Lymphoid														+								
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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WISTAR HAN RATS MALE		DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	males (cont...)
		ANIMAL ID	6	7	7	6	6	5	5	7	0	7	7	7	1	7	6	5	7	2	2	7	7	7	7	
0 mg/kg			4	2	2	2	3	1	8	2	0	2	2	2	9	2	8	3	2	4	2	4	2	2	2	
			8	7	7	2	8	7	7	8	2	9	9	9	6	7	7	3	8	1	9	7	7	7	7	

Hematopoietic Cell Proliferation Necrosis						2					2					2					2				1
Lymphoid Follicle, Atrophy	4			1										2											1
Thymus Atrophy	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia	4			2	4			4	2	2			2	2			2	3				3	3	4	1
Inflammation, Chronic																									2

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	M	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+
Skin Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ulcer	3					3										3		3								

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																									+

NERVOUS SYSTEM

Brain Compression	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	4			3	4	3											3	4							

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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Lab: BAT

WISTAR HAN RATS MALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 mg/kg		6	7	7	6	6	5	5	7	0	7	7	7	1	7	6	5	7	2	7	7	7	7	7	males (cont...)
		4	2	2	2	3	1	8	2	0	2	2	2	9	2	8	3	2	4	2	2	2	2	2	
		8	7	7	2	8	7	7	8	2	9	9	9	6	7	7	3	8	1	9	7	7	7	7	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	
		3	4	6	7	8	9	0	1	2	3	4	5	6	8	9	1	2	3	4	6	7	8	9	

Urethra
Inflammation, Chronic

Urinary Bladder

+ +

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| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|
| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
| | 0695 | 0777 | 0777 | 0574 | 0747 | 0227 | 0777 | 0777 | 0777 | 0577 | 0777 | 0777 | 0242 | 0222 | 0222 | 0222 | 0877 | 0877 | 0877 | 0447 | | 0447 | 0772 | 0772 |
| | 00032 | 00033 | 00034 | 00035 | 00036 | 00037 | 00039 | 00040 | 00041 | 00042 | 00043 | 00044 | 00045 | 00047 | 00048 | 00049 | 00050 | 00051 | 00052 | 00053 | | 00054 | 00055 | 00056 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Esophagus Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 3.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Colon Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 2.0 |
| Intestine Large, Rectum Parasite Metazoan Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2.0 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Angiectasis | | | | | 1 | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 | |
| Basophilic Focus | X | X | | | X | X | | | X | | | X | | X | X | X | | | X | X | X | | | | 19 | | | |
| Clear Cell Focus | X | X | X | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | | | X | X | 34 | | | |
| Fatty Change | 1 | 2 | | | 2 | | | | 1 | 1 | | | | 1 | | | | 2 | 1 | | | 2 | 2 | | 1 | 1 | 1 | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Mixed Cell Focus | X | | | | X | X | | | | | X | | | | | | | X | | | X | | | | 9 | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Bile Duct, Hyperplasia | | | | | | | | | | 1 | | | | | | | | | | | | | | | | 3 | 1.0 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | |

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Lab: BAT

| WISTAR HAN RATS MALE
0 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--|--------------------------------|
| | 0695 | 0727 | 0775 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | | | | | | | |
| | ANIMAL ID | 000322 | 000333 | 000344 | 000355 | 000366 | 000377 | 000388 | 000399 | 000400 | 000411 | 000422 | 000433 | 000444 | 000455 | 000466 | 000477 | 000488 | 000499 | 000500 | 000511 | 000522 | 000533 | | 000544 | 000555 | 000566 | 000577 | 000588 | 000599 |
| Inflammation, Chronic
Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0
2 2.0 | |
| Pancreas
Atrophy
Necrosis
Acinus, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
4 1.0
1 3.0
1 2.0 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach
Inflammation, Chronic
Mineralization
Necrosis
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
6 2.3
1 1.0
1 4.0
1 3.0 | |
| Stomach, Glandular
Inflammation, Chronic
Necrosis
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 4.0
1 4.0
1 2.0 | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel
Adventitia, Aorta, Hemorrhage
Aorta, Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 3.0
1 3.0 |
| Heart
Cardiomyopathy
Atrium, Epicardium, Inflammation, Chronic
Endocardium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
33 1.4
1 3.0
1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|----------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|
| | 065 | 072 | 077 | 050 | 072 | 046 | 072 | 022 | 077 | 077 | 077 | 055 | 077 | 077 | 077 | 022 | 022 | 022 | 022 | 022 | | 022 | 048 | 044 | 047 |
| 0 mg/kg | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| | 333 | 333 | 333 | 333 | 333 | 333 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 | 444 |
| | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 | 223 |

Epicardium, Fibrosis

2

1 2.0

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Degeneration, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hyperplasia | | 1 | | | | | | | | | | | | | | | 1 | 1 | 2 | 1 | | | | | | 12 1.6 | |
| Vacuolization Cytoplasmic | | 1 | 1 | | | | 1 | | | | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | | | | 1 | | 17 1.2 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hyperplasia | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 3 1.0 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | 4 | | | | | | | | | | 1 4.0 | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | M | + | + | + | 45 | |
| Hyperplasia | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 1.0 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Pars Distalis, Hyperplasia | | | | | | | 1 | | 2 | | | | | | | | | | | | | | | 2 | | 8 1.8 | |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 2 1.5 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 | |
| C-cell, Hyperplasia | | | | | 1 | 1 | 1 | | | 1 | 1 | 2 | | | | | 2 | 1 | | | | | 1 | 1 | 3 | 1 | 16 1.3 |
| Follicle, Hyperplasia | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 3 1.3 | |

GENERAL BODY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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Experiment Number: 20320 - 03

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Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | | | |
| 0 mg/kg | 6 | 7 | 7 | 5 | 7 | 4 | 7 | 2 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 4 | 7 | 7 | |
| | 9 | 2 | 2 | 0 | 2 | 6 | 2 | 4 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 8 | 8 | 9 | 2 | 2 |
| | 5 | 7 | 7 | 2 | 7 | 5 | 8 | 4 | 7 | 7 | 7 | 9 | 2 | 8 | 7 | 7 | 9 | 8 | 8 | 8 | 8 | 5 | 6 | 8 | 8 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Epididymis Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 4.0 |
| Preputial Gland Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 |
| Prostate Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 1.0 |
| Prostate Inflammation | | | | | | 2 | | 2 | | | 1 | 2 | | | | | | 1 | | 2 | 1 | | | 50 | 12 | 1.5 |
| Prostate Artery, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 50 | 1 | 2.0 |
| Seminal Vesicle Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 3 | 2.3 |
| Testes Edema | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 35 | 1.5 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymph Node Mediastinal, Hyperplasia, Lymphoid | | + | | | | | | | | | | | | | | | | | | | | + | | 50 | 3 | 1 3.0 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically M .. Missing tissue
 X .. Lesion present A .. Autolysis precludes evaluation
 I .. Insufficient tissue BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 20320 - 03

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Tetrabromobisphenol A

CAS Number: 79-94-7

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
0 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|--------|--------|
| | 0695 | 0727 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | 0772 | | 0772 | | | |
| ANIMAL ID | 00032 | 00033 | 00034 | 00035 | 00036 | 00037 | 00038 | 00039 | 00040 | 00041 | 00042 | 00043 | 00044 | 00045 | 00046 | 00047 | 00048 | 00049 | 00050 | 00051 | 00052 | 00053 | 00054 | 00055 | 00056 | 00057 | 00058 | 00059 | |
| Hematopoietic Cell Proliferation | 3 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | 8 1.8 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | 2 | 6 2.2 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Atrophy | 2 | 4 | 4 | | | | | | 2 | 4 | 3 | 3 | 4 | 3 | 1 | 2 | 4 | 3 | 1 | | | 1 | 4 | 3 | 4 | 4 | 1 | 4 | 39 2.8 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Ulcer | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | 3 | 10 3.1 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Compression | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 9 3.6 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
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Lab: BAT

| WISTAR HAN RATS MALE
0 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|----------|
| | 0695 | 0727 | 0772 | 0502 | 0727 | 0447 | 0722 | 0274 | 0772 | 0772 | 0772 | 0575 | 0772 | 0772 | 0772 | 0572 | 0772 | 0772 | 0772 | 0772 | 0488 | 0449 | 0722 | 0772 | |
| ANIMAL ID | 00032 | 00033 | 00034 | 00035 | 00036 | 00037 | 00039 | 00040 | 00041 | 00042 | 00043 | 00044 | 00045 | 00047 | 00048 | 00049 | 00050 | 00051 | 00052 | 00053 | 00054 | 00055 | 00056 | 00058 | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 1.0 | |
| Inflammation, Chronic Alveolus, Inflammation | | | | | | 1 | | | | 1 | | | | 1 | | | | | | | | | 1 | 8 1.0 | |
| Bronchiole, Hyperplasia | | | 1 | | | | | | | | | | | | | | | | | | | | 1 | 3 1.0 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | 2 | | | | | | | | | | | | | | 2 | | 1 | | | | 1 8 1.4 | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | 1 1 2.0 | |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1 2.0 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | | | | | | | | | 1 | | | | | | | | | | | | 2 1.0 | |
| Peritracheal Tissue, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 1 1 2.0 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | | | 3 | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Inflammation | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nephropathy | 1 | 1 | | | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | | 1 | 1 1 | 39 1.4 | |
| Pelvis, Inflammation, Suppurative | | | | | | | | 3 | | 1 | 1 | | | | | | | | | | | | | 4 1.8 | |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|----|-------|
| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 065 | 077 | 077 | 052 | 072 | 046 | 072 | 024 | 072 | 077 | 077 | 077 | 055 | 077 | 077 | 077 | 077 | 077 | 077 | 048 | 049 | 072 | 077 | * TOTALS | | |
| 0 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | | |
| | 32 | 33 | 34 | 35 | 36 | 37 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | | | |
| Urethra
Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | + | 3 | 1 | 1 3.0 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|------------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------|------|------|
| WISTAR HAN RATS MALE | DAY ON TEST | 0728 | 0622 | 0397 | 0657 | 0777 | 0777 | 0660 | 0777 | 0579 | 0769 | 0777 | 0777 | 0667 | 0777 | 0677 | 0777 | 0677 | 0777 | 0577 | 0777 | 0677 | 0777 | males
(cont...) | | |
| | 250 mg/kg | ANIMAL ID | 0061 | 0062 | 0063 | 0064 | 0065 | 0066 | 0067 | 0068 | 0069 | 0070 | 0071 | 0072 | 0073 | 0074 | 0075 | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | | 0082 | 0083 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum
Parasite Metazoan | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | X | | | | | X | | | | | X | X | | X | X | | X | X | X | X | | X | X | | | | |
| Clear Cell Focus | X | | | | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | 1 | 3 | 2 | 2 | 1 | | | 2 | 1 | | | | | 1 | 2 | 1 | | | 1 | 1 | | 1 | 2 | 1 | 1 | | |
| Mixed Cell Focus | X | | | | | X | | | | | | X | | | | | | X | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Vein, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bile Duct, Hyperplasia | | | | | | | 1 | | | | 1 | | | | | | | | 1 | | | 1 | | | | | |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | + | | + | | | | | | | | | | + | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| | 0
7
2
8 | 0
6
2
2 | 0
3
9
7 | 0
6
5
7 | 0
7
2
7 | 0
7
2
7 | 0
7
2
7 | 0
6
8
0 | 0
7
2
7 | 0
5
4
9 | 0
7
2
9 | 0
6
8
9 | 0
7
2
7 | 0
7
2
8 | 0
6
7
4 | 0
7
2
7 | 0
6
7
3 | 0
7
2
7 | 0
7
2
7 | 0
5
0
0 | 0
7
2
8 | 0
6
2
8 | 0
7
0
8 | | | |
| ANIMAL ID | 0
0
0
6
1 | 0
0
0
6
2 | 0
0
0
6
3 | 0
0
0
6
4 | 0
0
0
6
5 | 0
0
0
6
6 | 0
0
0
6
7 | 0
0
0
6
8 | 0
0
0
6
9 | 0
0
0
7
0 | 0
0
0
7
1 | 0
0
0
7
2 | 0
0
0
7
3 | 0
0
0
7
4 | 0
0
0
7
5 | 0
0
0
7
6 | 0
0
0
7
7 | 0
0
0
7
8 | 0
0
0
7
9 | 0
0
0
8
0 | 0
0
0
8
1 | 0
0
0
8
2 | 0
0
0
8
3 | 0
0
0
8
4 | 0
0
0
8
5 | |
| Adrenal Medulla
Hyperplasia
Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Parathyroid Gland
Hyperplasia | + | + | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | | | |
| Pituitary Gland
Cyst
Pars Distalis, Hyperplasia
Pars Intermedia, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| | | | | | | | | | | | 1 | | 1 2 | | 1 | | 3 | | | | | | | | | |
| Thyroid Gland
C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| | 1 | 1 | | 1 | | 4 | 1 | 1 | | 1 | 1 | 1 | | 1 | | | | 1 | 1 | 1 | | 2 | | 1 | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis
Atrophy
Granuloma Sperm | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | 1 | | 1 | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| Wistar Han Rats Male
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | males
(cont...) | | |
|-----------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|----|----|
| | 07 | 06 | 03 | 06 | 07 | 07 | 07 | 06 | 07 | 05 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 05 | | 07 | 06 |
| | 28 | 22 | 29 | 57 | 22 | 22 | 27 | 80 | 24 | 22 | 48 | 28 | 22 | 27 | 47 | 27 | 37 | 87 | 27 | 00 | | 20 | 28 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 68 | 68 | 68 | 68 | 68 | |
| | 12 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | |

Atrophy Inflammation 1 2 1 2 1 1 2 2

Seminal Vesicle Atrophy Inflammation + 1 1

Testes Edema Germinal Epithelium, Atrophy + 1 3 2 1 3 3 1 2 1 2 1 1 1 1 1 1 2

HEMATOPOIETIC SYSTEM

Bone Marrow +

Lymph Node, Mandibular Atrophy Ectasia +

Lymph Node, Mesenteric Atrophy Hyperplasia, Lymphoid Necrosis + 2

Spleen Angiectasis Congestion Hematopoietic Cell Proliferation Capsule, Fibrosis Lymphoid Follicle, Atrophy + + + + + + + + + + 2 + + + + + + + + + + + + 2 2 1 1 1 1 1 1 2

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

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Tetrabromobisphenol A

CAS Number: 79-94-7

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | | | | | | | | |
|----------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|------|------|------|------|
| | 0728 | 0622 | 0397 | 0652 | 0778 | 0777 | 0776 | 0675 | 0778 | 0579 | 0779 | 0678 | 0772 | 0778 | 0674 | 0777 | 0673 | 0778 | 0777 | 0570 | | | 0778 | 0674 | 0775 | 0776 | 0578 | 0774 | 0675 | |
| 250 mg/kg | 0061 | 0062 | 0063 | 0064 | 0065 | 0066 | 0067 | 0068 | 0069 | 0070 | 0071 | 0072 | 0073 | 0074 | 0075 | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 2 | 2 | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 4 | 3 | 2 | 4 | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin Ulcer Epidermis, Hyperplasia | | | | 3 | | 3 | | | | | | | | 3 | | | | | 3 | 3 | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | 3 | 3 | 3 | | | | 3 | | 4 | | 3 | | | | 4 | | | | | | | | | | | | | 4 | |
| Peripheral Nerve Axon, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spinal Cord Axon, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Hemorrhage Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|
| | 0
7
2
8 | 0
6
2
2 | 0
3
9
7 | 0
6
5
7 | 0
7
2
7 | 0
7
2
7 | 0
7
2
7 | 0
6
8
0 | 0
7
2
7 | 0
5
4
9 | 0
7
2
9 | 0
6
8
9 | 0
7
2
7 | 0
7
2
7 | 0
6
7
4 | 0
7
2
7 | 0
6
7
3 | 0
7
2
7 | 0
7
2
7 | 0
5
0
0 | | | 0
7
2
8 |
| Inflammation, Chronic
Alveolar Epithelium, Necrosis
Arteriole, Thrombosis
Bronchiole, Hyperplasia | 1 | | | | | | | | | 1 | | | | | | | | | | | | 1 | |
| Nose
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Eye
Inflammation, Acute
Retina, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 |
| Harderian Gland
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney
Cyst
Hydronephrosis
Inflammation, Suppurative, Multifocal
Nephropathy
Pelvis, Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 |
| Urinary Bladder
Transitional Epithelium, Hyperplasia | 1 | | 1 | 1 | | | | | 1 | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 2 | | | | | | 2 | | | | | | | | | | | | | | | |
| | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
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Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | |
| | 3 | 7 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | | 6 | 7 | 6 |
| | 5 | 1 | 4 | 6 | 5 | 3 | 7 | 8 | 5 | 9 | 7 | 7 | 9 | 9 | 8 | 8 | 8 | 8 | 7 | 8 | 4 | 9 | 8 | |
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum
Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 1.0 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 | |
| Basophilic Focus | | X | X | | X | | X | X | | | | X | | X | X | | | X | | X | X | X | | 26 | |
| Clear Cell Focus | | | X | | | | X | X | X | | | X | X | X | X | | X | X | X | X | | X | | 33 | |
| Eosinophilic Focus | | | | X | | | | | X | X | | | | | | | | | | | | | | 3 | |
| Fatty Change | | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | | 1 | 1 | 1 | 3 | 1 | | | 1 | | | 1 | 1 | 35 1.4 | |
| Mixed Cell Focus | | | | | | | X | X | | | | | | | X | | | X | X | | X | | | 10 | |
| Thrombosis | | | | | | | | | | | | | | | X | | | | | | | | | 1 | |
| Artery, Vein, Necrosis | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Bile Duct, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | 5 1.0 | |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | 3 | | | | | | | | | 1 3.0 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | 3 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 250 mg/kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | 3 | 0 | 1 | 9 | 0 | 2 | 2 | 2 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 9 | 2 | 7 | 8 |
| | 5 | 1 | 4 | 6 | 5 | 3 | 7 | 8 | 5 | 9 | 7 | 7 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 4 | 9 | 8 | 8 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

Fat, Necrosis 3 2.3

Pancreas Atrophy + 50 1 1.0

Salivary Glands + 50

Stomach, Forestomach Inflammation, Chronic Ulcer + 50 5 2.2 1 3.0

Stomach, Glandular Inflammation, Chronic Mineralization Epithelium, Glands, Hyperplasia + 50 2 1.0 3 2.0 1 2.0

CARDIOVASCULAR SYSTEM

Blood Vessel + 50

Heart Cardiomyopathy Endocardium, Hyperplasia + 50 1 2 1 2 1 1 1 2 1 3 1 1 2 23 1.2 1 3.0

ENDOCRINE SYSTEM

Adrenal Cortex Hemorrhage Hyperplasia Necrosis Vacuolization Cytoplasmic + 50 2 1 1 1 1 1 2 1 1 1 1 17 1.1 1 2.0 5 1.6 2 2.0 17 1.1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue
X .. Lesion present A .. Autolysis precludes evaluation
I .. Insufficient tissue BLANK .. Not examined microscopically
1-4 .. Lesion qualified as: 1) Minimal 3) Moderate 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|----|-----|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| | 3 | 7 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | | | | | | |
| | 5 | 1 | 4 | 6 | 5 | 3 | 7 | 8 | 5 | 9 | 7 | 7 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 4 | 7 | 6 | 7 | 6 | 8 | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 0 | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hyperplasia | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 1 | 1.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Pituitary Gland | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Cyst | | | 1 | | | | | | | | | | | | | 1 | | | | | | | | | | | | 3 | 1.0 |
| Pars Distalis, Hyperplasia | | | | | | | | 1 | | | | | | | | | 2 | | | 2 | | | | | | | | 8 | 1.5 |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | 2 | 2.5 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| C-cell, Hyperplasia | | | | | | 2 | 1 | 1 | 2 | 2 | | | | 1 | 1 | | 2 | 2 | 2 | | | 1 | | 1 | | | | 27 | 1.4 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|---|-----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Atrophy | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | 1 | 4.0 |
| Granuloma Sperm | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 | 1.0 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Inflammation | | | | 1 | | | | | | 1 | | 1 | | | | | | | | 1 | | | | | | | | | 6 | 1.0 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
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Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| | 3 | 7 | 5 | 1 | 9 | 0 | 2 | 2 | 2 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | | 2 | 2 |
| ANIMAL ID | 5 | 1 | 4 | 6 | 5 | 3 | 7 | 8 | 5 | 9 | 7 | 7 | 8 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Atrophy | | | | | | | | | | | | 3 | | | | | | | | | | 1 | |
| Inflammation | 4 | 2 | 2 | 3 | 2 | 2 | | | | 2 | 2 | | | 1 | | | | | | 1 | 1 | 19 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | 3 | | | | | | | | | | 1 | |
| Inflammation | 3 | | 2 | 3 | | | | | | | | | | | | | | | | | | 5 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Edema | | 1 | | | | 1 | 2 | | | 1 | 1 | | | 1 | 1 | 1 | | | 1 | 1 | 1 | 32 | |
| Germinal Epithelium, Atrophy | | | | | | | | | | | 4 | | | | | | | 2 | 2 | | | 4 | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | 2 | | | | | | | | | | | | | | | | | | | | | 1 | |
| Ectasia | | | | | | | | | | | | | 3 | | | | | | | | | 1 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | 2 | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Necrosis | 1 | | | | | | | | | | | | | | | | | | | | | 1 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hematopoietic Cell Proliferation | 2 | | | | | | | | | | | | 1 | | 1 | | | 3 | | | 1 | 15 | |
| Capsule, Fibrosis | | | | | | | | | | | | | | | | | | | | 1 | | 1 | |
| Lymphoid Follicle, Atrophy | 3 | | | | 3 | 2 | | | | | 4 | | | | | | | | | | | 5 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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Experiment Number: 20320 - 03

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Tetrabromobisphenol A

CAS Number: 79-94-7

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Lab: BAT

| WISTAR HAN RATS MALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----------|
| | 0035 | 0071 | 0054 | 0056 | 0077 | 0077 | 0077 | 0066 | 0077 | 0044 | 0077 | 0077 | 0077 | 0077 | 0066 | 0077 | 0077 | 0077 | 0077 | 0066 | 0077 | 0066 | 0077 | | |
| ANIMAL ID | 0008 | 0007 | 0008 | 0008 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | 0009 | | |
| Thymus Atrophy | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| | | 4 | 3 | 3 | | 4 | | 2 | 3 | 4 | 4 | 1 | 2 | 1 | 2 | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 2 | 46 | 3.0 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skin Ulcer Epidermis, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 7 | 3.1 |
| | | | | | | | | | | 1 | | | | | | | | | | | | | | 1 | 1.0 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | 3 | 4 | | | 3 | 3 | | | | | | | | | | | | | | 12 | 3.3 |
| Peripheral Nerve Axon, Degeneration | | | | | | + | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Spinal Cord Axon, Degeneration | | | | | | + | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung Hemorrhage Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| | | | | | | | | 2 | | | | | | | | | | | | | | | | 2 | 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|----------|
| | 0035 | 0070 | 0014 | 0056 | 0065 | 0072 | 0077 | 0077 | 0077 | 0066 | 0074 | 0077 | 0077 | 0077 | 0077 | 0066 | 0072 | 0072 | 0072 | 0072 | | 0066 | 0077 | 0066 |
| ANIMAL ID | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 |
| Inflammation, Chronic Alveolar Epithelium, Necrosis | 1 | | | | | | | | | | 1 | | | | | 1 | | | | | | 1 | | 6 1.0 |
| Arteriole, Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Bronchiole, Hyperplasia | | | | | | | | | 1 | | | 1 | | | | | | | | | | | | 2 1.0 |
| Nose Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 5 1.6 |
| Trachea Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 1.0 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye Inflammation, Acute | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 1.0 |
| Retina, Atrophy | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Harderian Gland Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 1.0 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 |
| Hydronephrosis | | | | | | | | | | | | | | | 2 | | | | | | | | | 2 2.0 |
| Inflammation, Suppurative, Multifocal | 3 | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Nephropathy | | | 1 | 1 | | 1 | | | 1 | | 4 | 1 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | | 1 | 30 1.2 |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 2 2.0 |
| Urinary Bladder Transitional Epithelium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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X .. Lesion present
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Species/Strain: RATS/Wistar Han

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | males
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WISTAR HAN RATS MALE | 0 | 7 | 7 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | | | | | | | | |
| | 2 | 8 | 8 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 2 | 2 | 9 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| 500 mg/kg | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | |
| Intestine Large, Cecum
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum
Inflammation
Parasite Metazoan
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basophilic Focus | X | | | | | | | X | X | X | X | | X | | | | | X | | | | X | | | X | | | | | | | | | | | | | | | | X | X | X | | | | | | | | | | | | |
| Clear Cell Focus | X | X | X | | X | X | X | | X | X | X | | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | 1 | | | | | 1 | | 2 | | | | | | | | | | 1 | | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | | | | | | | | 1 | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule
Inflammation, Suppurative | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | X | | | | | | | | |
| Bile Duct, Hyperplasia | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WISTAR HAN RATS MALE

500 mg/kg | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 7 | 7 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 2 | 2 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 8 | 8 | 4 | 3 | 6 | 7 | 8 | 7 | 7 | 8 | 9 | 7 | 8 | 7 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| | | males (cont...) | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ulcer Epithelium, Hyperplasia | | | | | | | | | | 1 | | | | | 2 | | | | | | | | | | |
| Stomach, Glandular Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mineralization | 1 | | | | 2 | | | 2 | | 1 | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart Cardiomyopathy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Endocardium, Hyperplasia | 2 | 1 | 1 | 1 | | | 2 | | 1 | 1 | | | | | 2 | | | 1 | 2 | | 1 | | 2 | 2 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex Cytoplasmic Alteration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 1 | | | | | | | | | 1 | | | | | | | | | | | | | 2 | | |
| Metaplasia, Osseous Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Tetrabromobisphenol A
 CAS Number: 79-94-7

Date Report Requested: 01/23/2013
 Time Report Requested: 15:06:23
 First Dose M/F: 07/25/07 / 07/26/07
 Lab: BAT

| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|------------------------------|-------------|-----------|---|-----|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| WISTAR HAN RATS MALE | DAY ON TEST | 7 | 7 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | ANIMAL ID | 2 | 2 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 8 | 8 | 4 | 3 | 6 | 7 | 8 | 7 | 8 | 9 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | |
| 500 mg/kg | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Vacuolization Cytoplasmic | | 1 | | 1 1 | | | 1 | | 1 | | | 3 | | 1 1 | | | 1 | | 1 | | | | | | | | | | |
| Adrenal Medulla | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | 2 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Intermedia, Hyperplasia | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C-cell, Hyperplasia | | 2 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Follicle, Hyperplasia | | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+ + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Preputial Gland
Inflammation

+ + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Prostate

+ + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
| WISTAR HAN RATS MALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males
(cont...) |
| | | 7 | 7 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 500 mg/kg | 2 | 2 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | | |

Inflammation

1 1 2 1

Seminal Vesicle
Inflammation

+ +

Testes
Edema
Arteriole, Necrosis, Fibrinoid
Germinal Epithelium, Atrophy

+
1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 1 1 3 2 1 1 1
3

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node
Renal, Ectasia

+ +
3

Lymph Node, Mandibular

+ +

Lymph Node, Mesenteric
Ectasia

+
3

Spleen
Hematopoietic Cell Proliferation

+
2 1 1 3 3 1

Thymus
Atrophy

+
4 3 3 3 2 3 4 2 4 1 2 4 2 4 2 4 3 4 2 3 1 1 3

INTEGUMENTARY SYSTEM

Mammary Gland

+ +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------|
| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
| | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | |
| 500 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | males
(cont...) |
| 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Skin Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | 3 | | | | 3 | | | | | | | | 3 | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve Axon, Degeneration | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord Axon, Degeneration | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Inflammation, Chronic Bronchiole, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |
| Nose Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Degeneration | 2 | | | | | | 2 | | | | | | | | | | 2 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | |
|--|---------------------------------------|-----------------------------|
| * .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade | | |
| + .. Tissue examined microscopically | | |
| X .. Lesion present | M .. Missing tissue | 1-4 .. Lesion qualified as: |
| I .. Insufficient tissue | A .. Autolysis precludes evaluation | 1) Minimal 3) Moderate |
| | BLANK .. Not examined microscopically | 2) Mild 4) Marked |

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
500 mg/kg | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males
(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|
| | | 7 | 7 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 2 | 2 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Lipocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | 1 | | 1 | 4 | | 1 | | 1 | 1 | 1 | | 2 | | 2 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | |
| Pelvis, Inflammation, Suppurative | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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CAS Number: 79-94-7

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Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 05 | 07 | 06 | 07 | 07 | 06 | |
| 500 mg/kg | 27 | 27 | 24 | 28 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 24 | 22 | 22 | 21 | 22 | 22 | 21 | 22 | 21 | 22 | 23 | 22 | 24 | 50 |
| ANIMAL ID | 00136 | 00077 | 00038 | 00089 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 50 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Cecum
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| Intestine Large, Colon
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| Intestine Large, Rectum
Inflammation
Parasite Metazoan
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Basophilic Focus | X | X | | X | X | | | X | X | | X | X | | | | X | | X | | X | | X | X | 24 | | | |
| Clear Cell Focus | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | | | X | X | X | 43 | | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Fatty Change | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 2 | | 1 | 1 | | 1 | 1 | 1 | | | 3 | 1 | 1 | 30 | 1.2 | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | |
| Mixed Cell Focus | X | X | | | | X | X | | X | X | | | | | X | X | | | | | | | X | 12 | | | |
| Bile Duct, Hyperplasia | | | | | | | | | 1 | | 1 | 2 | 1 | | | | | | 1 | | 2 | | | | 7 | 1.3 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
500 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
| | 0727 | 0728 | 0729 | 0730 | 0731 | 0801 | 0802 | 0803 | 0804 | 0805 | 0806 | 0807 | 0808 | 0809 | 0810 | 0811 | 0812 | 0813 | 0814 | 0815 | | 0816 |
| ANIMAL ID | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150 | 00151 | 00152 | 00153 | 00154 | 00155 | 00156 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Pancreas Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Stomach, Forestomach Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| Stomach, Forestomach Ulcer | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Stomach, Forestomach Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Stomach, Glandular Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| Stomach, Glandular Mineralization | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Stomach, Glandular Ulcer | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 23 | 1.4 |
| Heart Cardiomyopathy | | | 2 | | | 1 | | | 2 | 1 | | 2 | 2 | | | | 1 | 1 | | 1 | | | 1 | 2.0 |
| Heart Endocardium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 49 | | |
| Adrenal Cortex Cytoplasmic Alteration | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Adrenal Cortex Hyperplasia | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 | 1.2 |
| Adrenal Cortex Metaplasia, Osseous | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 | 1.0 |
| Adrenal Cortex Necrosis | | | | | | | | | | | | | | | | | | | | | 3 | | | 1 | 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|-----|
| | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 05 | 07 | 06 | 07 | 07 | 06 | | |
| 500 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| Vacuolization Cytoplasmic | 1 | | | | | | | | | 1 | | | | | | 1 | | 1 | | | | | 1 | 15 | 1.1 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 49 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3 | 1.7 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Parathyroid Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + | 47 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Hyperplasia | | 1 | | 1 | | | | | | 1 | | | | | | | 1 | 1 | | | 2 | 2 | | | 9 | 1.3 |
| Pars Intermedia, Hyperplasia | | | | | | | | | | 2 | | | | | | | 1 | | | | | | | | 2 | 1.5 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | 2 | 1 | | 2 | | | | | 1 | | | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | | 1 | 2 | 1 | 26 | 1.2 |
| Follicle, Hyperplasia | | | | | 1 | | | | | | | | | | | | | | | | | | 2 | | 2 | 1.5 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | 1 | | 1 | | | | | | 1 | | | | | | | | | 1 | 1 | | | 10 | 1.0 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Tetrabromobisphenol A

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Lab: BAT

| WISTAR HAN RATS MALE
500 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|-----|-----|
| | 0727 | 0728 | 0729 | 0730 | 0731 | 0801 | 0802 | 0803 | 0804 | 0805 | 0806 | 0807 | 0808 | 0809 | 0810 | 0811 | 0812 | 0813 | 0814 | 0815 | 0816 | 0817 | 0818 | 0819 | | | | |
| ANIMAL ID | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150 | 00151 | 00152 | 00153 | 00154 | 00155 | 00156 | 00157 | 00158 | 00159 | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 12 | 1.5 | | |
| Seminal Vesicle Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 2.5 | |
| Testes Edema | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 37 | 1.4 | |
| Arteriole, Necrosis, Fibrinoid | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymph Node Renal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 3.0 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymph Node, Mesenteric Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 3.0 |
| Spleen Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 9 | 1.8 |
| Thymus Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | 44 | 2.9 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 20320 - 03

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
| | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 05 | 07 | 06 | 07 | 07 | 06 | |
| 500 mg/kg | 27 | 27 | 24 | 28 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 24 | 22 | 22 | 11 | 22 | 22 | 21 | 22 | 21 | 22 | 22 | 25 | 50 | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 50 | |
| | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 3 | |
| | 33 | 33 | 33 | 33 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 6 | |
| | 67 | 67 | 68 | 69 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 0 | |

Skin Ulcer + 50
 3 3.0

MUSCULOSKELETAL SYSTEM

Bone + 50

NERVOUS SYSTEM

Brain Compression + 50
 3 3 2 3 1 2 9 2.2

Peripheral Nerve Axon, Degeneration 1 1 2.0

Spinal Cord Axon, Degeneration 1 1 2.0

RESPIRATORY SYSTEM

Lung Inflammation, Chronic Bronchiole, Hyperplasia + 50
 2 1 1 2 6 1.3
 1 1.0

Nose Inflammation Olfactory Epithelium, Degeneration + 50
 1 2 1 1 7 1.6
 2 2.0

Trachea + 50

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically M .. Missing tissue
 X .. Lesion present A .. Autolysis precludes evaluation
 I .. Insufficient tissue BLANK .. Not examined microscopically
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|----------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 05 | 07 | 06 | 07 | 07 | 06 | |
| 500 mg/kg | 27 | 27 | 24 | 28 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 24 | 22 | 22 | 21 | 22 | 22 | 28 | 21 | 27 | 26 | 27 | 27 | 26 | |
| ANIMAL ID | 00136 | 00011 | 00013 | 00033 | 00044 | 00044 | 00044 | 00044 | 00044 | 00044 | 00044 | 00044 | 00044 | 00055 | 00055 | 00055 | 00055 | 00055 | 00055 | 00055 | 00055 | 00055 | 00055 | 00056 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cataract | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Retina, Atrophy | | | 2 | | | | | | | | | 2 | | | | | | | | | | | | | 3 | 2.3 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | X | | | | | | | X | | | | | | | X | | | | | | | | | 4 | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Metaplasia, Lipocyte | | | | | | | | 1 | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Nephropathy | 1 | | | 1 | 1 | | 1 | 3 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | 35 | 1.2 |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Renal Tubule, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 | 3.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 | 4.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------|
| WISTAR HAN RATS MALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 7 |
| 1000 mg/kg | | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 8 | 8 | 2 | 2 | 2 |
| | | 7 | 2 | 9 | 8 | 7 | 9 | 7 | 7 | 8 | 9 | 7 | 9 | 8 | 8 | 5 | 8 | 7 | 7 | 9 | 8 | 9 | 8 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 |
| | | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 8 |
| | | | | | | | | | | | | | | | | | | | | | | | males (cont...) |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 1 | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum
Diverticulum
Metaplasia, Osseous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 4 | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | X | | | | | | | | | | | X | | | X | X | X | | | X | | X |
| Clear Cell Focus | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Eosinophilic Focus | | X | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | 1 | | | 2 | 1 | 2 | 1 | | 1 | 1 | 1 | | | | 1 | | | 1 | 2 | 1 | 1 | 2 |
| Mixed Cell Focus | | | X | | | | X | | | X | X | | | | | | | | | X | X | |
| Bile Duct, Hyperplasia | | | | | | | 1 | | 1 | | | | | | | | | | 1 | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------------|---|
| WISTAR HAN RATS MALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males
(cont...) | |
| | 1000 mg/kg | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 8 | 8 | 2 | 0 | 0 | 7 | 2 | 2 | 2 | | 2 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| | | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 8 | 8 | | |

Fat, Necrosis

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Pancreas Atrophy Acinus, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Salivary Glands

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Stomach, Forestomach Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Stomach, Glandular Inflammation, Chronic Mineralization Ulcer Epithelium, Glands, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Blood Vessel Aorta, Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart Cardiomyopathy Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex Hyperplasia Vacuolization Cytoplasmic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) |
|------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|
| | 0
7
2
7 | 0
6
7
2 | 0
7
2
9 | 0
7
2
8 | 0
7
2
7 | 0
7
2
9 | 0
7
2
7 | 0
5
1
7 | 0
7
2
8 | 0
7
2
9 | 0
7
2
7 | 0
7
2
8 | 0
7
2
8 | 0
6
0
5 | 0
7
2
8 | 0
7
2
7 | 0
3
8
9 | 0
6
0
8 | 0
7
2
7 | 0
7
2
8 | 0
7
2
9 | 0
7
2
9 | 0
7
2
8 | 0
7
2
8 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Medulla
Hyperplasia
Vacuolization Cytoplasmic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Parathyroid Gland
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Pituitary Gland
Cyst
Pars Distalis, Hyperplasia
Pars Intermedia, Hyperplasia | M | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | |
| | | | | | | | 1 | | | | | | 2 | | | | 4 | | | | | 1 | | | |
| Thyroid Gland
C-cell, Hyperplasia
Follicle, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | 1 | | 1 | | 2 | 1 | | | 1 | | 1 | 1 | | | | | | 1 | | 1 | | | 1 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Preputial Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Prostate
Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) |
|------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|--------------------|
| | 077 | 067 | 077 | 077 | 077 | 077 | 057 | 077 | 077 | 077 | 077 | 077 | 077 | 067 | 077 | 077 | 037 | 077 | 067 | 077 | 077 | 077 | | |
| | 277 | 272 | 298 | 227 | 227 | 227 | 177 | 228 | 229 | 227 | 228 | 228 | 058 | 228 | 227 | 228 | 228 | 209 | 208 | 207 | 208 | 208 | | |
| | 001 | 001 | 006 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inflammation | 1 | | | | | | | | | | | | | | 2 | 1 | 1 | | 1 | 2 | | 1 |
| Seminal Vesicle Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Testes Edema | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | | 1 | | 1 | 1 |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | |
| Germinal Epithelium, Mineralization | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric Ectasia | + | + | 3 | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen Hematopoietic Cell Proliferation | + | + | 1 | + | 2 | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen Lymphoid Follicle, Atrophy | | | | | | | | | 1 | | | | | | 3 | | | | | | | |
| Thymus Atrophy | 4 | 3 | 4 | 3 | 4 | 4 | 4 | | 4 | 3 | 2 | 4 | 2 | | 4 | 2 | 4 | 1 | 4 | 4 | 3 | 2 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
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Date Report Requested: 01/23/2013

Test Type: CHRONIC

Tetrabromobisphenol A

Time Report Requested: 15:06:23

Route: GAVAGE

CAS Number: 79-94-7

First Dose M/F: 07/25/07 / 07/26/07

Species/Strain: RATS/Wistar Han

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | males
(cont...) | |
|----------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| WISTAR HAN RATS MALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| | | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 7 | 6 | | 7 |
| 1000 mg/kg | | 7 | 2 | 7 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 8 | 8 | 7 | 7 | 9 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | |
| | | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | |

Skin Ulcer +

MUSCULOSKELETAL SYSTEM

Bone Osteosclerosis +

Skeletal Muscle

NERVOUS SYSTEM

Brain Compression Gliosis + 2 4

RESPIRATORY SYSTEM

Lung Foreign Body Inflammation, Granulomatous Inflammation, Chronic Metaplasia, Osseous Bronchiole, Hyperplasia Vein, Necrosis + 1 1 1 1 2 1 1 1 4

Nose Inflammation Goblet Cell, Hyperplasia + 2 1 2 1 1

Trachea +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

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Tetrabromobisphenol A

CAS Number: 79-94-7

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Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WISTAR HAN RATS MALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1000 mg/kg | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |

males (cont...)

Perforation

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland Hyperplasia | + | + | + | + | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydronephrosis | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infarct | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| WISTAR HAN RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
| | 0
7
2
8 | 0
7
2
7 | 0
7
2
9 | 0
7
2
7 | 0
7
2
7 | 0
5
0
1 | 0
7
2
8 | 0
5
3
4 | 0
7
2
8 | 0
7
2
7 | 0
7
2
7 | 0
7
2
8 | 0
5
3
1 | 0
4
4
7 | 0
7
2
7 | 0
7
2
9 | 0
7
2
9 | 0
5
9
4 | 0
7
2
8 | 0
7
2
8 | 0
7
2
7 | | 0
6
7
2 | 0
7
2
8 |
| 1000 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | |
| | 0
0
1
8
9 | 0
0
1
9
2 | 0
0
1
9
3 | 0
0
1
9
5 | 0
0
1
9
6 | 0
0
1
9
7 | 0
0
2
9
0 | 0
0
2
0
1 | 0
0
2
0
2 | 0
0
2
0
3 | 0
0
2
0
4 | 0
0
2
0
6 | 0
0
2
0
7 | 0
0
2
0
9 | 0
0
2
0
0 | 0
0
2
0
1 | 0
0
2
0
2 | 0
0
2
0
3 | 0
0
2
0
4 | 0
0
2
0
5 | 0
0
2
0
6 | 0
0
2
0
7 | 0
0
2
0
8 | 0
0
2
0
9 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Cecum
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Duodenum
Diverticulum | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 3.0 |
| Metaplasia, Osseous | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Intestine Small, Ileum
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 4.0 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Angiectasis | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Basophilic Focus | | | X | | | X | | X | X | | | | | | | | | | | X | | X | | | | | 13 | |
| Clear Cell Focus | X | X | X | X | X | X | | X | X | X | X | X | | | X | X | X | X | X | X | X | X | X | X | | | 41 | |
| Eosinophilic Focus | | | | X | | | | X | | | | | | | | | | | | | | | | | | | 3 | |
| Fatty Change | 2 | 1 | | 1 | | 1 | | | 1 | 1 | 1 | | | | | 1 | 1 | | 1 | 1 | 1 | | 1 | | | 27 | 1.2 | |
| Mixed Cell Focus | X | X | X | X | | | | X | | X | X | | | X | | | | X | | X | | | | | | | 16 | |
| Bile Duct, Hyperplasia | | 1 | | | | | | | | | | | | | | | 1 | | 1 | 2 | | | | | | | 7 | 1.1 |
| Mesentery | | | | | | | | | | | | | | | | + | | | | | | + | | | | 2 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS MALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | 0728 | 0727 | 0729 | 0722 | 0727 | 0701 | 0702 | 0703 | 0704 | 0705 | 0706 | 0707 | 0708 | 0709 | 0710 | 0711 | 0712 | 0713 | 0714 | 0715 | 0716 | 0717 | |
| ANIMAL ID | 00189 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | 2 | | | | 3 | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Atrophy | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Glands, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Aorta, Mineralization | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cardiomyopathy | | | | 1 | 1 | | | | 1 | 1 | | | | | | | | 2 | 1 | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| Wistar Han Rats Male
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
| | 0728 | 0727 | 0729 | 0722 | 0727 | 0701 | 0702 | 0703 | 0708 | 0707 | 0707 | 0707 | 0707 | 0708 | 0703 | 0704 | 0707 | 0702 | 0702 | 0704 | | 0705 | 0707 | 0707 | 0706 |
| ANIMAL ID | 00189 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00022 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 2 | 2 | 2 | 9 | 9 | 4 | 8 | 8 | 8 |
| | 8 | 7 | 9 | 7 | 7 | 1 | 8 | 4 | 8 | 7 | 7 | 7 | 8 | 1 | 7 | 7 | 9 | 9 | 9 | 9 | 4 | 8 | 8 | 7 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 2 | 3 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | 1 | | | | | | | | | 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Cyst | | | | | | | | | | | | | | | | | 1 | | 1 | | | | | | 3 |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Pars Intermedia, Hyperplasia | | | | | 2 | | | | | 1 | 2 | | | | | | | | | | | | | | 2 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Hyperplasia | 1 | 1 | 2 | 1 | | | | | 1 | 3 | | 2 | | | | | | | | | | | | | 19 |
| Follicle, Hyperplasia | | | | | | 1 | | | | | | | | | | | | | | | | | | | 2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | 3 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Tetrabromobisphenol A

CAS Number: 79-94-7

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Lab: BAT

| WISTAR HAN RATS MALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-----------|
| | 078 | 077 | 079 | 077 | 077 | 075 | 077 | 075 | 077 | 077 | 077 | 077 | 077 | 075 | 074 | 077 | 077 | 077 | 075 | 077 | | | 077 | 076 |
| ANIMAL ID | 00189 | 00119 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | 00099 | |
| Inflammation | | | | | 1 | | | | 1 | | | | | 1 | | | | 2 | 1 | | 2 | | 1 | 14 1.3 |
| Seminal Vesicle Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 1.0 |
| Testes Edema | + | + | + | + | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 36 1.2 |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | 3 | | | | | | | | | | 4 | 2 3.5 |
| Germinal Epithelium, Mineralization | | | | | | | | | | | | 1 | | | | | | | | | | | 2 | 2 1.5 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node, Mesenteric Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 4 3.0 |
| Spleen Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 10 1.3 |
| Lymphoid Follicle, Atrophy | | | | | 2 | | | | 1 | | | 1 | 1 | | 1 | | | | | | | | 2 | 2 2.0 |
| Thymus Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 45 3.2 |
| | | 3 | 4 | 4 | 4 | 4 | | | 3 | 3 | 1 | 2 | 3 | 3 | 4 | | | 3 | 3 | 3 | 3 | 3 | 3 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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 M .. Missing tissue
 A .. Autolysis precludes evaluation
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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------------|----|----|----|--|--|
| | | 07 | 07 | 07 | 07 | 07 | 05 | 07 | 05 | 07 | 07 | 07 | 07 | 07 | 05 | 04 | 07 | 07 | 07 | 07 | 05 | 07 | 07 | 06 | 07 | | |
| | | 28 | 27 | 29 | 27 | 27 | 01 | 28 | 34 | 28 | 27 | 27 | 28 | 31 | 47 | 27 | 29 | 29 | 29 | 48 | 28 | 28 | 27 | 22 | 28 | | |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | | |
| | | 18 | 19 | 19 | 19 | 19 | 19 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | | |
| | | 92 | 93 | 95 | 96 | 97 | 99 | 90 | 91 | 92 | 93 | 94 | 96 | 97 | 99 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | | |
| | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
| Skin | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | 6 3.0 | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Osteosclerosis | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Compression | | | | | | | | | | | | | | | | | | | | | | 5 3.0 | | | | | |
| Gliosis | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | | | | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | 3 1.3 | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 6 1.0 | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | 3 1.0 | | | | | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 4 1.0 | | | | | |
| Vein, Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | 8 1.6 | | | | | |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| WISTAR HAN RATS MALE
1000 mg/kg | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS | |
| | | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | | |
| | | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 9 | 2 | 2 | 7 | | 2 |
| | | 8 | 7 | 9 | 7 | 7 | 1 | 8 | 4 | 8 | 7 | 7 | 7 | 8 | 1 | 7 | 7 | 9 | 9 | 9 | 4 | 8 | 8 | 7 | 2 | | 8 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 9 | 2 | 3 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

Perforation 3 1 3.0

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 2 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | | | X | | | | | | | X | | | | 3 |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Suppurative | | | | | | | | | | 3 | | | | | | | | | | | | | | | | 1 3.0 |
| Inflammation, Chronic | | | | | 2 | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Nephropathy | 1 | 1 | | 1 | 2 | | 1 | 1 | | | | 1 | | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 31 1.1 | |
| Pelvis, Inflammation, Suppurative | 1 | | | | | | | | | | | | | | | | | | | 1 | | | | | | 5 1.6 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|---|
| WISTAR HAN RATS FEMALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 mg/kg | | 3 | 6 | 7 | 7 | 7 | 7 | 3 | 6 | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 5 | 2 | 2 | 3 | 2 | 6 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 3 |
| | | 4 | 6 | 9 | 6 | 0 | 8 | 4 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 9 | 9 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | | | | | 2 | | | | | | | | | | | | | | | | | | |
| Perforation | 4 | | | | | | 2 | | | | X | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parasite Metazoan | | | | | | | 1 | | | | | | | | | | | | | | | | 1 | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parasite Metazoan | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Clear Cell Focus | | | | | X | X | | | | | | X | | X | X | | | | | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Fatty Change | | | | | | | | 1 | | | | | | | | | 2 | 1 | | | | | 1 | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | | | | X | | | | | | | | | | | | X | X | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue
X .. Lesion present A .. Autolysis precludes evaluation
I .. Insufficient tissue BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|------------------------------|
| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3 | 6 | 7 | 7 | 7 | 7 | 3 | 6 | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | | |
| | 6 | 5 | 2 | 2 | 3 | 2 | 6 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | | |
| | 4 | 6 | 9 | 6 | 0 | 8 | 4 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 9 | 9 | 3 | | |
| 0 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|
| Bile Duct, Cyst | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bile Duct, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | |
| Duct, Cyst | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Inflammation, Chronic | | | | | | | | 2 | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Inflammation, Chronic | | | | | 2 | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Cardiomyopathy | | | | | 1 | | | | | | | | | | | 1 | 1 | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocardium, Hyperplasia | | | | 2 | | | | | | | | | | | | | | | | | | | | | 2 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------------|
| WISTAR HAN RATS FEMALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 6 | 7 | 7 | 7 | 7 | 3 | 6 | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 5 | 2 | 2 | 3 | 2 | 6 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 3 |
| | | 4 | 6 | 9 | 6 | 0 | 8 | 4 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 9 | 9 | 9 | 9 | 0 |
| 0 mg/kg | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 1 | | | | | | | | | | | | | | | | | 1 | | | | | |
| Ovary
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| Stromal Hyperplasia, Mixed Cell
Bilateral, Cyst | | | | | | | | | | | | | | | | | | | | | | | X | | | |
| Bursa, Dilatation | | | | | | | | | | X | | | | | | | | | | | | | | | | |
| Rete Ovarii, Cyst | | | | | | | | | | | | | | | | | | X | | | | | | X | | |
| Uterus
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Dilatation | | | | | | | 1 | | | | | | X | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | 1 | | 2 | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia, Cystic | | | | | 1 | | | | | | | | | | | 3 | | | | | | | 2 | | | 1 |
| Vagina
Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|----------------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| WISTAR HAN RATS FEMALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 6 | 7 | 7 | 7 | 7 | 3 | 6 | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | |
| 0 mg/kg | | 4 | 6 | 9 | 6 | 0 | 8 | 4 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 9 | 9 | 9 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Spleen | | + | + | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hematopoietic Cell Proliferation | | | | 1 | 1 | 1 | | | | | 1 | | 1 | 1 | | 1 | 1 | | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | 1 | 2 | 1 | | 1 | 2 | 1 | 2 | 4 | | 2 | 4 | 2 | 1 | 1 | | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | | | |
| Hyperplasia | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Galactocele | | | | X | X | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Compression | | | 3 | | | | | | | 3 | 2 | | | | | 2 | | | 3 | 2 | | | | | | | | | | |
| Hippocampus, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Meninges, Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|---|
| WISTAR HAN RATS FEMALE | DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females
(cont...) | | |
| | ANIMAL ID | | 3 | 6 | 7 | 7 | 7 | 7 | 3 | 6 | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | | 7 | |
| | | | 6 | 5 | 2 | 2 | 3 | 2 | 6 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | | 2 | 2 |
| 0 mg/kg | | | 4 | 6 | 9 | 6 | 0 | 8 | 4 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

Inflammation

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| | 0729 | 0725 | 0728 | 0722 | 0723 | 0728 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | |
| 0 mg/kg | 0049 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0004 | 0005 | 0007 | 0008 | 0009 | 0011 | 0012 | 0013 | 0014 | 0015 | 0016 | 50 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Esophagus Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Esophagus Perforation | | | | | | | | | | | | | | | | | | | | | | | | 3 3.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum Parasite Metazoan | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 3 1.0 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 1.0 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver Angiectasis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Liver Basophilic Focus | X | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 47 | |
| Liver Clear Cell Focus | X | | X | | X | X | X | | | | X | X | X | X | | | X | | X | X | | | 24 | |
| Liver Congestion | | | | | | | | | | | 1 | | | | | | | | | | | | 1 1.0 | |
| Liver Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Liver Fatty Change | | | 1 | | | 1 | 1 | | 2 | | | | | | 1 | | | 1 | | | | 2 | 11 1.3 | |
| Liver Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Liver Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | X | | | | | | 1 | |
| Liver Mixed Cell Focus | X | | X | | X | X | X | | | | X | | | | | | | | X | X | X | X | 13 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|
| | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 05 | 07 | | 07 | 06 | 05 | 07 |
| 0 mg/kg | 29 | 25 | 28 | 29 | 30 | 28 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 27 | 27 | 27 | 27 | 27 | 27 | 28 | 28 | |
| | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|--|--|--|--|--|--|---|---|---|---|--|--|---|--|--|--|--|--|---|---|--|--|--|---|--------|
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | X | 2 |
| Bile Duct, Hyperplasia | 1 | | | | | | | 1 | 2 | 1 | 1 | | | 1 | | | | | | 1 | 1 | | | | | 11 1.1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.5 |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Duct, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Ulcer | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 1.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mineralization | 4 | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 1.0 |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Endocardium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|-------|
| | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 05 | 07 | | 07 | 07 | 06 | 05 | 07 |
| 0 mg/kg | 29 | 25 | 28 | 22 | 33 | 08 | 00 | 08 | 00 | 00 | 03 | 13 | 29 | 00 | 09 | 05 | 04 | 29 | 68 | 73 | 79 | 26 | 54 | 72 | | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 24 | 55 | 54 | 55 | 55 | 55 | 55 | 55 | 55 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 67 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 88 | |
| | 93 | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

Myocardium, Mineralization

3

1 3.0

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Angiectasis | | 2 | | | 3 | | | 1 | 2 | | | 3 | | | 1 | | | | 2 | | | | | 3 | | 12 | 2.0 |
| Degeneration, Cystic | | | | | | | | | 2 | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Hyperplasia | | | | 3 | | | 1 | | | | | 1 | | | | | | 2 | | | | | | | | 7 | 1.6 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 |
| Capsule, Fibrosis | | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 49 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 | | | | 2 | 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 48 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Pars Distalis, Hyperplasia | | 2 | 2 | | | 2 | | | | | 1 | | | | 2 | | | | 2 | 3 | | | 3 | 2 | 16 | 2.3 | |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | 1 | | | | | | | | | 2 | | | | | 2 | 1.5 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | 1 | | 1 | 1 | 1 | 3 | 2 | 2 | | 1 | 1 | 1 | 2 | | | | 2 | | 2 | | 1 | | | 1 | 32 | 1.4 | |
| Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | 3 | | | 2 | | | 2 | 2.5 | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

GENERAL BODY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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2) Mild 4) Marked

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Tetrabromobisphenol A

Time Report Requested: 15:06:23

Route: GAVAGE

CAS Number: 79-94-7

First Dose M/F: 07/25/07 / 07/26/07

Species/Strain: RATS/Wistar Han

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| WISTAR HAN RATS FEMALE | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 6 | 5 | 7 | |
| | | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 1 | 2 | 3 | 2 | 3 | 5 | 0 | 2 | 4 | 2 | 3 | 2 | 6 | 4 |
| 0 mg/kg | | 9 | 5 | 8 | 9 | 0 | 8 | 0 | 8 | 0 | 0 | 3 | 9 | 0 | 9 | 0 | 4 | 9 | 6 | 8 | 0 | 9 | 2 | 8 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | |
| | | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | |
| | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------|------------|---|-----------|----------|------------|----------|------------|------------|------------|
| Clitoral Gland Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| | | | | | | | | | | | | | | | | | | | | | 50 | 4 | 1.0 | | | | |
| Ovary Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Ovary Inflammation, Acute | | | | 2 | | | | | | | | | | | | | 50 | 1 | 2.0 | | | | | | | | |
| Ovary Stromal Hyperplasia, Mixed Cell | | | | | | | | | | 3 | | | | | | | | | | | | | 50 | 1 | 3.0 | | |
| Ovary Bilateral, Cyst | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Ovary Bursa, Dilatation | | | | | | | | | | | | | | | | | | X | | | | | | 4 | | | |
| Ovary Rete Ovarii, Cyst | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Uterus Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | |
| Uterus Dilatation | | | | | | | | | | | | | | | | | | | | | | | 50 | 1 | 1.0 | | |
| Uterus Inflammation, Suppurative | 2 | | | | 2 | | | | | | | | 2 | 3 | | | | | | | | | | | 2 | 7 | 2.0 |
| Uterus Endometrium, Hyperplasia, Cystic | | | | | | | | | | 2 | | | | 2 | 3 | | | | 3 | | | | | | 8 | 2.1 | |
| Vagina Necrosis | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 3.0 | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|----------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|-----|
| | 0729 | 0725 | 0728 | 0729 | 0730 | 0727 | 0728 | 0729 | 0730 | 0727 | 0728 | 0729 | 0730 | 0727 | 0728 | 0729 | 0730 | 0727 | 0728 | 0729 | 0730 | 0727 | 0728 | 0729 | | 0730 | |
| 0 mg/kg | 0049 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0010 | 0011 | 0012 | 0014 | 0015 | 0017 | 0018 | 0019 | 0021 | 0022 | 0023 | 0024 | 0025 | 0026 | 0027 | 0028 | 0030 | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Spleen | + | + | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic Cell Proliferation | | | 1 | | 2 | 1 | | | | 1 | 4 | | 2 | 2 | | | | 1 | | 1 | | | 4 | 1 | 26 | 1.5 | |
| Lymphoid Follicle, Atrophy | | 3 | | | | | | | | | | | | | | | 2 | | | | | 2 | | | 3 | 2.3 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | 2 | 4 | 2 | 1 | 4 | 2 | 2 | 1 | 2 | 2 | 1 | | 3 | 3 | 3 | 4 | 2 | | | 1 | 2 | 1 | 4 | 2 | 43 | 2.0 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Galactoceles | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Compression | | | | | | | | | | | 3 | | | | | | 4 | | 3 | | | 3 | 3 | | | 11 | 2.8 |
| Hippocampus, Necrosis | | | | | | | | | | | | | | | | | 3 | | | | | | | | | 1 | 3.0 |
| Meninges, Inflammation, Acute | | | | 3 | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-----------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|--------|----|
| | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 05 | 07 | | 07 | 06 | 05 | 07 |
| 0 mg/kg | 029 | 005 | 008 | 009 | 000 | 008 | 000 | 008 | 000 | 000 | 000 | 003 | 009 | 000 | 000 | 005 | 004 | 009 | 006 | 008 | 000 | 002 | 008 | 009 | |
| | 004 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 006 | 006 | 006 | 006 | 006 | 006 | 006 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 008 | |
| | 009 | 003 | 004 | 005 | 006 | 007 | 008 | 009 | 000 | 001 | 002 | 004 | 005 | 007 | 008 | 009 | 001 | 002 | 003 | 004 | 005 | 006 | 007 | 008 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Inflammation, Chronic | | 1 | | | | | | | | | | | | | | | | | | | | | | 2 1.0 | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | 2 | | | | | | | 1 2.0 | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | 2 | | | | | | 2 | | | | 1 | | | | | | 1 | | | 3 | 1 | | 11 1.8 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation | | | | | | | 1 | | | | | | | | | | | | | | | | | 2 1.0 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Malformation | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | X | | | | | | | | | | X | | | | | 2 | |
| Hydronephrosis | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 | |
| Nephropathy | | | | | 2 | 1 | | | | | 1 | 1 | | | | | 2 | 1 | | | | | | 9 1.3 | |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | 2 | | | | | 2 2.0 | |
| Renal Tubule, Autolysis | | 3 | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Tetrabromobisphenol A
CAS Number: 79-94-7

Date Report Requested: 01/23/2013
Time Report Requested: 15:06:23
First Dose M/F: 07/25/07 / 07/26/07
Lab: BAT

| Wistar Han Rats Female
0 mg/kg | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-----------------------------------|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|
| | | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 05 | 07 | 07 | 07 | 06 | | |
| ANIMAL ID | | 029 | 005 | 008 | 009 | 000 | 008 | 000 | 008 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 005 | 004 | 009 | 006 | 008 | 000 | 009 | 002 | 008 | 009 |
| Inflammation | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
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M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

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1) Minimal 3) Moderate
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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|
| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | | |
| | 0728 | 0729 | 0728 | 0729 | 0725 | 0722 | 0729 | 0728 | 0723 | 0735 | 0732 | 0739 | 0738 | 0733 | 0740 | 0739 | 0738 | 0739 | 0734 | 0756 | | 0766 | 0767 | | |
| | 0028 | 0029 | 0028 | 0029 | 0025 | 0022 | 0029 | 0028 | 0023 | 0035 | 0032 | 0039 | 0038 | 0033 | 0040 | 0039 | 0038 | 0039 | 0034 | 0056 | | 0066 | 0067 | | |
| 250 mg/kg | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | |
| | 00281 | 00282 | 00283 | 00284 | 00285 | 00286 | 00287 | 00288 | 00289 | 00290 | 00291 | 00292 | 00293 | 00294 | 00295 | 00296 | 00297 | 00298 | 00299 | 00300 | 00301 | 00302 | 00303 | 00304 | 00305 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon
Inflammation, Suppurative
Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum
Parasite Metazoan | + | + | + | + | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Basophilic Focus | X | X | X | X | X | X | X | X | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Clear Cell Focus | X | X | X | | X | | | | | | X | | X | X | | | X | X | X | | | | | X |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | X | |
| Eosinophilic Focus | | | | | | X | | | | | | | | | | | | | | | X | | | |
| Fatty Change | | | | | | 1 | | | | | | | | | 1 | 1 | | | | | | | | 2 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | X | X | X | X | X | | | | | | | X | X | X | X | | | X | X | | X | | | X |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------------------|--|
| | 07
28 | 07
29 | 07
28 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | 07
29 | | |
| 250 mg/kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

Necrosis
Pigmentation
Bile Duct, Hyperplasia

1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 1 1

Mesentery
Fat, Necrosis

+
1

Pancreas
Acinus, Atrophy

+
1 1 1

Salivary Glands

+ +

Stomach, Forestomach
Inflammation, Suppurative
Inflammation, Chronic

+
2

Stomach, Glandular
Inflammation, Suppurative
Inflammation, Chronic
Mineralization
Ulcer

+
1 1 1

CARDIOVASCULAR SYSTEM

Blood Vessel

+ +

Heart
Cardiomyopathy

+
1 1 1 1 2 1 1

Endocardium, Hyperplasia

1

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
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Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|
| | 0
7
2
8 | 0
7
2
9 | 0
7
2
8 | 0
7
2
9 | 0
7
2
9 | 0
6
5
2 | 0
7
2
9 | 0
7
2
8 | 0
3
8
3 | 0
3
5
5 | 0
6
2
4 | 0
7
3
0 | 0
7
3
0 | 0
7
2
9 | 0
7
2
9 | 0
7
2
8 | 0
7
2
8 | 0
7
2
9 | 0
5
4
8 | 0
6
9
3 | | | 0
6
5
6 |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Angiectasis | | | | | | | | | | | | 2 | 3 | | | | | 2 | | | | | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | 3 | | | | | | 2 | | | | | | 1 | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | 1 | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | 2 | | | | 3 | | | | | 3 | | 2 | 1 | | 2 |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C-cell, Hyperplasia | 1 | 1 | 2 | 1 | 1 | 1 | | | | | | 1 | 2 | 2 | 2 | 1 | | 3 | 2 | 2 | | 1 | 2 |
| Follicle, Hyperplasia | | | 2 | | | | | | | | | | | | | | | | | | | 1 | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+ +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

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Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| | 0728 | 0729 | 0728 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | |
| ANIMAL ID | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 |
| Inflammation | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | X | | | | | | | | | | | | | | | | | | | | | | |
| Bursa, Dilatation | | | | | | X | | | | X | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Dilatation | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Cervix, Hyperplasia, Stromal | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia, Cystic | | | | | 2 | 1 | 2 | | | | | | | | 2 | 1 | | | | | | 1 | | 2 | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | + |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Mediastinal, Congestion | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Plasma Cell | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic Cell Proliferation | 1 | 1 | 1 | | | | 2 | | 1 | | 2 | 1 | 1 | 1 | | | | | 1 | | 2 | 1 | | 2 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | | |
|------------------------|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|---|---|
| WISTAR HAN RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | | |
| 250 mg/kg | | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 3 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | | 6 | 6 | 7 | |
| ANIMAL ID | | 2 | 2 | 2 | 2 | 2 | 5 | 2 | 2 | 8 | 5 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 4 | 9 | 5 | 2 | |
| | | 8 | 9 | 8 | 9 | 9 | 2 | 8 | 8 | 3 | 5 | 4 | 0 | 0 | 9 | 9 | 0 | 9 | 8 | 8 | 9 | 8 | 3 | 6 | 9 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | | |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Red Pulp, Atrophy

2

Thymus

+ +

Atrophy

1 1 1 2 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 4 2 3 2

Hyperplasia

2

Epithelial Cell, Hyperplasia

3

INTEGUMENTARY SYSTEM

Mammary Gland

+ +

Galactocele

X

Hyperplasia

2

Skin

+ +

MUSCULOSKELETAL SYSTEM

Bone

+ +

Skeletal Muscle

NERVOUS SYSTEM

Brain

+ +

Compression

3 3 2 4 3

Peripheral Nerve

Spinal Cord

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|------------------------|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|----|
| WISTAR HAN RATS FEMALE | | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | | 07 |
| 250 mg/kg | | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | | 89 |
| ANIMAL ID | | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | 0100 | 0101 | |

| | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Granulomatous Alveolar Epithelium, Hyperplasia Bronchiole, Hyperplasia | 1 | | | | | | | | | | | | | 1 | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | | | | | | | 1 | | | 2 | | | | | | 1 | 1 | 2 | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | 1 | | | | |
| Retina, Atrophy | | | | | | | | | | | | | 2 | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | | | | | | | | | | | | | | | | 1 | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | X |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | 4 | | | |
| Infarct | 2 | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 | 1 | | 1 | | | | | 1 | | | | | | | | 1 | | 1 | 1 | 3 | 1 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | 1 | | 1 | | | | | |
| Renal Tubule, Autolysis | | | | | | | | | | | | | | | | 1 | | 1 | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

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Species/Strain: RATS/Wistar Han

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|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------------|------|------|------|
| WISTAR HAN RATS FEMALE

250 mg/kg | DAY ON TEST | 078 | 079 | 078 | 079 | 072 | 079 | 078 | 073 | 073 | 076 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 075 | 076 | 076 | 077 | females
(cont...) | | | |
| | ANIMAL ID | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | 0000 | 0001 | 0002 | | 0003 | 0004 | 0005 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | | 3 | 3 | 3 |

Urinary Bladder

+ +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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Lab: BAT

| WISTAR HAN RATS FEMALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|-------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|-----|
| | 07 | 05 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 04 | 07 | 07 | 05 | 07 | 07 | | 06 | 07 | 07 | 06 | 07 |
| ANIMAL ID | 030 | 007 | 008 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| | 330 | 337 | 338 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 | 333 |
| | 000 | 000 | 000 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 003 |
| | 678 | 758 | 868 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Necrosis | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Pigmentation | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Bile Duct, Hyperplasia | | | 1 | 2 | | 1 | 1 | | 2 | | | | | 2 | 1 | | 1 | | | | 1 | 2 | | | | | 29 | 1.2 | |
| Mesentery | | + | + | | | | | | | | | | | | | | | + | | + | + | | | | | | 8 | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | 2 | 2 | | | | | | 3 | 1.7 | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | 4 | 1.0 | |
| Salivary Glands | | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Suppurative | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Suppurative | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Ulcer | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cardiomyopathy | | | | | 1 | | 1 | 1 | | | | | | | | | | | | | | | | | | | | 10 | 1.1 |
| Endocardium, Hyperplasia | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------|
| | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | | 0730 |
| ANIMAL ID | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | 2 | | | 1 | | | | | | | 2 | | | | | 1 | | | | | | 7 1.9 |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | 4 | | | | 1 4.0 |
| Hyperplasia | | | | 1 | | | | | | 3 | | 2 | | | | | | | | 1 | | 7 1.9 |
| Necrosis | | | | | | | | 1 | | | | | | | | | | | | | | 1 1.0 |
| Vacuolization Cytoplasmic | | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | 3 1.0 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | 1 | | | 2 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | 2 | | | | 1 2.0 |
| Parathyroid Gland | + | M | M | M | M | + | + | M | + | + | M | + | M | + | + | M | + | + | + | + | + | 39 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | | | | | | | | 1 | | 1 1.0 |
| Pars Distalis, Hyperplasia | | | | 3 | | 2 | | 1 | | 2 | | | | 1 | | | 1 | | | | 3 | 13 2.0 |
| Pars Intermedia, Hyperplasia | | | | | | 1 | | | | 2 | | | | 2 | | | | | | | | 3 1.7 |
| Thyroid Gland | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| C-cell, Hyperplasia | | | 1 | 1 | 1 | 1 | | | 2 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | | 1 | 2 | 2 | | 37 1.5 |
| Follicle, Hyperplasia | | | | | | | | | | | 1 | | 1 | | | | 3 | | | | | 4 1.8 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland + 50

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

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|------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
| | 07 | 05 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 04 | 07 | 07 | 05 | 07 | 07 | | 06 | 07 |
| 250 mg/kg | 30 | 27 | 58 | 30 | 29 | 30 | 30 | 14 | 29 | 30 | 33 | 36 | 00 | 22 | 92 | 28 | 38 | 28 | 29 | 33 | 36 | 23 | 30 |
| ANIMAL ID | 0030 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 |

Inflammation 2 1.0

Ovary 49

Cyst X 4

Bursa, Dilatation 2

Uterus 50

Dilatation 3 4 2.5

Inflammation, Suppurative 1 1 3 1.7

Cervix, Hyperplasia, Stromal 3 1 3.0

Endometrium, Hyperplasia, Cystic 2 1 2 2 13 1.5

Vagina 1

HEMATOPOIETIC SYSTEM

Bone Marrow 50

Lymph Node 1

Mediastinal, Congestion 1 2.0

Lymph Node, Mandibular 48

Lymph Node, Mesenteric 50

Hyperplasia, Plasma Cell 3 1 3.0

Inflammation, Suppurative 3 1 3.0

Spleen 50

Hematopoietic Cell Proliferation 1 2 2 1 4 1 3 1 3 1 1 2 2 1 1 1 30 1.5

Inflammation, Suppurative 3 1 3.0

Lymphoid Follicle, Atrophy 2 4 2 3.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
| | 07 | 05 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 04 | 07 | 07 | 05 | 07 | 07 | 06 | 07 | 07 | |
| 250 mg/kg | 30 | 27 | 58 | 30 | 29 | 30 | 30 | 14 | 29 | 30 | 33 | 13 | 33 | 22 | 92 | 28 | 30 | 83 | 28 | 30 | 33 | 64 | 70 | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 30 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | |
| | 00 | 00 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 03 | |
| | 67 | 78 | 89 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | |

Red Pulp, Atrophy

1 2.0

Thymus

Atrophy

Hyperplasia

Epithelial Cell, Hyperplasia

+ 50

1 4 3 1 2 2 2 3 2 2 4 2 4 4 1 2 4 2 1 2 1 4 2 3

2 2.5

1 3.0

43 2.1
2 2.5
1 3.0

INTEGUMENTARY SYSTEM

Mammary Gland

Galactocele

Hyperplasia

+ 50

2

1
2 2.0

Skin

+ 50

MUSCULOSKELETAL SYSTEM

Bone

+ 50

Skeletal Muscle

+ 2

NERVOUS SYSTEM

Brain

Compression

+ 50

2 2 3 3 2

10 2.7

Peripheral Nerve

+ 1

Spinal Cord

+ 1

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
250 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | | |
|-------------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|-----|
| | 07
30 | 05
27 | 06
58 | 07
30 | 07
29 | 07
30 | 07
30 | 06
40 | 07
14 | 07
09 | 07
03 | 07
31 | 06
33 | 07
33 | 07
22 | 04
92 | 07
28 | 07
33 | 05
83 | 07
28 | | 07
30 | 06
64 | 07
23 | 07
33 | 06
62 | 07
29 | 06
79 | 07
30 | | |
| ANIMAL ID | 003006 | 003007 | 003008 | 003009 | 003010 | 003011 | 003012 | 003013 | 003014 | 003015 | 003016 | 003017 | 003018 | 003019 | 003020 | 003021 | 003022 | 003023 | 003024 | 003025 | 003026 | 003027 | 003028 | 003029 | 003030 | 003031 | 003032 | 003033 | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | 1.4 |
| Trachea | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Harderian Gland | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 1.1 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.5 |
| Renal Tubule, Autolysis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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CAS Number: 79-94-7

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Lab: BAT

| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS | | | |
|-------------------------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|-----------|--|
| DAY ON TEST | | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 4 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | | | | |
| WISTAR HAN RATS FEMALE | | 3 | 2 | 5 | 3 | 2 | 3 | 3 | 1 | 2 | 3 | 1 | 3 | 3 | 2 | 9 | 2 | 3 | 8 | 2 | 2 | 3 | 3 | 6 | 2 | 3 | | |
| | 250 mg/kg | 0 | 7 | 8 | 0 | 9 | 0 | 0 | 4 | 9 | 0 | 3 | 6 | 0 | 2 | 2 | 8 | 0 | 3 | 8 | 9 | 0 | 0 | 4 | 9 | 0 | | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 50 | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | females
(cont...) | | |
|------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|
| WISTAR HAN RATS FEMALE | 500 mg/kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| | | 5 | 7 | 7 | 6 | 7 | 7 | 3 | 7 | 4 | 7 | 7 | 3 | 4 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | | 7 | 6 |
| | | 4 | 2 | 2 | 0 | 3 | 2 | 2 | 3 | 8 | 2 | 2 | 1 | 5 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | | 3 | 2 |
| | | 5 | 9 | 9 | 7 | 0 | 9 | 1 | 0 | 8 | 8 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery
Fat, Necrosis | + | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas
Acinus, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach
Inflammation, Chronic
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular
Inflammation, Acute
Mineralization
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart
Cardiomyopathy
Endocardium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex
Angiectasis
Degeneration, Cystic
Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | 2 | 1 | | | | | | | | | 2 | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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500 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
| | 0
5
4
5 | 0
7
2
9 | 0
7
2
9 | 0
6
0
7 | 0
7
3
0 | 0
7
2
9 | 0
3
2
1 | 0
7
3
0 | 0
4
8
8 | 0
7
2
9 | 0
7
2
8 | 0
3
1
0 | 0
4
5
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | 0
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0 | 0
7
3
0 | 0
7
3
0 | 0
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0 | 0
7
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0 | 0
7
3
0 | 0
6
3
7 | | | |
| ANIMAL ID | 0
0
3
3
1 | 0
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3
3
2 | 0
0
3
3
3 | 0
0
3
3
4 | 0
0
3
3
5 | 0
0
3
3
6 | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
5
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | |
| Hyperplasia | | 1 | 1 | | | | | | | | | | | | | 2 | | | | | | | | | | 2 |
| Vacuolization Cytoplasmic | 1 | | | | | | | | | | | | | | | | | | | 1 | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thrombosis | | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | 1 | | | 1 | | 1 | 2 | | | 2 | | | | | | | 2 | | | 2 | | | 1 | | |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C-cell, Hyperplasia | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | | 1 | 1 | 2 | 1 | | 1 | 1 | 2 | | 2 | 1 | 2 | 1 | 1 | 2 | 1 | |
| Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 1 | | | | | 1 | | | | | | | | | | | | | | 1 | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

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(cont...) | | |
|----------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| WISTAR HAN RATS FEMALE | | 0
5
4
5 | 0
7
2
9 | 0
7
2
9 | 0
6
0
7 | 0
7
3
0 | 0
7
2
9 | 0
3
2
1 | 0
7
3
0 | 0
4
8
8 | 0
7
2
8 | 0
7
2
8 | 0
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1
0 | 0
4
5
0 | 0
7
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3
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | | 0
6
3
7 | |
| 500 mg/kg | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | |
| | | 0
0
3
3
1 | 0
0
3
3
2 | 0
0
3
3
3 | 0
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3 | 0
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4 | 0
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4 | 0
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3
3
4 | 0
0
3
3
5 | 0
0
3
3
5 | 0
0
3
3
5 | 0
0
3
3
5 | |
| Cyst | | | | | X | X | | | | X | | | | | | | | | | | | | | |
| Bursa, Dilatation | | | | | | | | | | | | | | | | | | X | | | | | | |
| Rete Ovarii, Cyst | | | | | X | X | | | X | X | | | | | | | | | | | | | | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Dilatation | | | | | 2 | | | | | | | | | 4 | | | | | | | | | | |
| Hyperplasia, Glandular, Focal | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | 3 | | | | | | | | | | | 1 | | | | | | | |
| Cervix, Hyperplasia, Stromal | | | | | | 3 | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia, Cystic | | | | | 1 | 2 | 2 | 3 | | | | | | | | 1 | | | | 1 | | | | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node
Mediastinal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node, Mediastinal | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hematopoietic Cell Proliferation | | | | | | | | 3 | | | | | 1 | 1 | 3 | | | 1 | | 2 | 1 | 1 | 1 | 3 | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | 3 | 2 | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|------|
| | 0729 | 0729 | 0728 | 0749 | 0737 | 0724 | 0767 | 0777 | 0755 | 0755 | 0777 | 0777 | 0777 | 0755 | 0777 | 0766 | 0776 | 0755 | 0766 | 0766 | | 0777 | 0755 | 0777 |
| 500 mg/kg | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 00356 | 50 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 1.5 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 1.0 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basophilic Focus | | X | X | X | | X | | X | X | | X | X | X | X | | X | X | X | X | | X | X | X | 40 | |
| Clear Cell Focus | | X | X | | | | | X | X | X | | X | X | X | | X | | X | | | | | | 19 | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | X | | | | | | 3 | |
| Fatty Change | | | | | | | | | | 1 | | | | | | | 2 | | 1 | | | | 2 | 7 1.6 | |
| Hepatodiaphragmatic Nodule | | | | | | | X | | | | | | | | | | | | | | | | | 1 | |
| Mixed Cell Focus | | X | X | | | | | | | | | X | X | | X | | X | | | | | | X | 12 | |
| Necrosis | | | | | | | | | | | | | | 1 | | | | 1 | | 3 | | | | 4 1.8 | |
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | X | | | | X | | 3 | |
| Bile Duct, Hyperplasia | 1 | | 1 | | | 1 | 2 | 1 | | | 1 | 1 | | | | | 1 | | | 1 | | | | 21 1.1 | |
| Centrilobular, Necrosis | | | | | | 2 | | | | | | | | | | | | | | | | | | 1 2.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|
| | 07 | 07 | 07 | 04 | 03 | 02 | 06 | 07 | 07 | 05 | 05 | 07 | 07 | 07 | 05 | 07 | 06 | 07 | 06 | 05 | | 06 | 06 | 07 | 05 | 07 |
| 500 mg/kg | 02 | 07 | 08 | 09 | 07 | 04 | 03 | 07 | 09 | 02 | 02 | 03 | 03 | 03 | 02 | 06 | 02 | 03 | 02 | 03 | 02 | 04 | 00 | 02 | 07 | 02 |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 55 | 55 | 55 | 55 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 88 |
| | 66 | 67 | 68 | 69 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 60 | 60 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|-----|
| Mesentery
Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 2 | 2.0 |
| Pancreas
Acinus, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 49 | | | |
| Stomach, Forestomach
Inflammation, Chronic
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 2.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Stomach, Glandular
Inflammation, Acute
Mineralization
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|--|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Heart
Cardiomyopathy
Endocardium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 3 | 1.3 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Adrenal Cortex
Angiectasis
Degeneration, Cystic
Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 6 | 1.8 |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

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Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
500 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|-----------|
| | 0729 | 0729 | 0728 | 0746 | 0737 | 0722 | 0706 | 0707 | 0707 | 0705 | 0705 | 0707 | 0707 | 0707 | 0705 | 0707 | 0706 | 0707 | 0705 | 0706 | | 0707 | 0705 | 0707 |
| ANIMAL ID | 003566 | 003567 | 003568 | 003569 | 003570 | 003571 | 003572 | 003573 | 003574 | 003575 | 003576 | 003577 | 003578 | 003579 | 003580 | 003581 | 003582 | 003583 | 003584 | 003585 | 003586 | 003587 | 003588 | |
| Hyperplasia | | | 2 | | | | 2 | | | | | | | | 2 | | | | | | | | | 7 1.7 |
| Vacuolization Cytoplasmic | | | | | | | 2 | | | | | 1 | | | | | | | 2 | | | | | 5 1.4 |
| Adrenal Medulla Thrombosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 3.0 |
| Islets, Pancreatic Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 2.0 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 48 |
| Pituitary Gland Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 2.0 |
| Pars Distalis, Hyperplasia | | | | | | | | | | 2 | 2 | 2 | 1 | | 2 | | | | 1 | | | | | 14 1.6 |
| Pars Intermedia, Hyperplasia | | | | | | | | | | | | 1 | | | | | | | | | | | | 2 1.5 |
| Thyroid Gland C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 39 1.4 |
| Follicle, Hyperplasia | 2 | 2 | 1 | | | | | | | 1 | 1 | 1 | 2 | 2 | | 1 | 2 | 1 | 1 | 1 | | 1 | 2 | 3 2.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| Clitoral Gland Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 1 1.0 |
| Inflammation | | | | | | | | | | | | 1 | | | | | | | | | | | | 4 1.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
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|------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|----|
| | 07 | 07 | 07 | 04 | 03 | 02 | 06 | 07 | 07 | 05 | 05 | 07 | 07 | 07 | 05 | 07 | 06 | 07 | 06 | 05 | | 06 | 06 | 07 | 05 | 07 |
| 500 mg/kg | 29 | 22 | 22 | 29 | 27 | 24 | 29 | 22 | 22 | 23 | 23 | 23 | 23 | 22 | 26 | 22 | 23 | 22 | 23 | 22 | 24 | 20 | 22 | 27 | 29 | |
| ANIMAL ID | 00356 | 00357 | 00358 | 00359 | 00360 | 00361 | 00362 | 00363 | 00364 | 00365 | 00366 | 00367 | 00368 | 00369 | 00370 | 00371 | 00372 | 00373 | 00374 | 00375 | 00376 | 00377 | 00378 | 00379 | 00380 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|--|---|--|--|--|--|--|--|--|--|---|--|--|--|--|--|---|--|--|--|--|---|---|--|--|---|
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Bursa, Dilatation | | X | | | | | | | | | X | | | | | | X | | | | | | X | | | 5 |
| Rete Ovarii, Cyst | | | | | | | | | | | | | | | | | | | | | | X | X | | | 6 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Dilatation | | | | | | | | | | | | | 2 | | | | | | | | | | | | 3 | 2.7 |
| Hyperplasia, Glandular, Focal | | | | | | | | | | 2 | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Cervix, Hyperplasia, Stromal | | | | | | | | | | 3 | | 2 | | | | | | | 3 | | | | | | 4 | 2.8 |
| Endometrium, Hyperplasia, Cystic | 3 | | | | | | | | | | | | | | 1 | | | | 3 | | 3 | | | 2 | 11 | 2.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Mediastinal, Ectasia | | | | | | | | | | | | 3 | | | | | | | | | | | | | 1 | 3.0 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 49 | |
| Lymph Node, Mediastinal | | | | | | | | | | | | | | | | | | | | | | | + | | 1 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic Cell Proliferation | | | | | 1 | 3 | 3 | 2 | | | | 1 | 1 | 1 | | | 1 | 4 | | 4 | 3 | | 3 | 2 | 26 | 1.9 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
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Lab: BAT

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500 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | |
|---------------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|--------|----|--|
| | 07 | 07 | 07 | 04 | 03 | 02 | 06 | 07 | 07 | 05 | 05 | 07 | 07 | 07 | 05 | 07 | 06 | 07 | 06 | 05 | | 06 | 06 | 07 | 05 | 07 | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | | |
| Thymus Atrophy Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 | | |
| | 1 | | | 2 | 1 | 2 | 4 | 2 | 1 | 1 | 1 | 1 | | 2 | 1 | 2 | 2 | 2 | 2 | 1 | | | 3 | | 40 1.8 | | |
| | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland Galactocele | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | X | | | | | | | | | | | | | | | | | | | | X | | | | 2 | | |
| Skin Inflammation Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | 2 | | | | | | | | | | | | | | | 1 2.0 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | | | | | | | | | 3 | | | 3 | | | | 9 3.3 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung Congestion Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | 1 | | | | | | | | | | | | | | | 1 1.0 | | |
| | | | | 1 | | 1 | | | | | | | | | | | | | | | | | 1 | | 3 1.0 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
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|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|---------------------------|--|
| | 07 | 07 | 07 | 04 | 03 | 02 | 06 | 07 | 07 | 05 | 05 | 07 | 07 | 07 | 05 | 07 | 06 | 07 | 06 | 05 | 06 | 06 | 07 | 05 | | 07 | |
| 500 mg/kg | 29 | 22 | 22 | 29 | 27 | 24 | 29 | 22 | 22 | 23 | 23 | 23 | 23 | 29 | 26 | 22 | 23 | 22 | 23 | 22 | 24 | 20 | 22 | 27 | 22 | | |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | | |
| | 35 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | | |
| | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Nose Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 7 1.3 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye Cataract Retina, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 2 3.0 3 2.3 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney Cyst Infarct Nephropathy Pelvis, Inflammation, Suppurative Renal Tubule, Autolysis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 2 1 13 1.3 3 1.7 1 3.0 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------|
| WISTAR HAN RATS FEMALE | DAY ON TEST | 0729 | 0729 | 0531 | 0729 | 0729 | 0729 | 0729 | 0571 | 0777 | 0676 | 0677 | 0777 | 0575 | 0676 | 0777 | 0777 | 0777 | 0676 | 0171 | 0777 | 0777 | 0777 | females
(cont...) |
| | 1000 mg/kg | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | |
| | ANIMAL ID | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | 00382 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | |
| Perforation | | | | | | | | | | | 4 | | | | | | | | | | 4 | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parasite Metazoan | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoid Tissue, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Clear Cell Focus | X | X | | X | | X | | X | X | | | | X | | X | | X | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | X | | | | | | | | | |
| Fatty Change | | | | | 1 | | | | | | | | | | | 1 | | | 1 | 1 | | | |
| Mixed Cell Focus | X | | | X | | X | | | X | | | | X | | X | X | X | | | | | | X |
| Necrosis | | | | | | | | | | | | 2 | | | | | | | | | | | |
| Bile Duct, Cyst | | | | | | X | | | | | | | | | | | | | | | | | |
| Bile Duct, Hyperplasia | 1 | | | 1 | | 2 | 2 | | 2 | | | | 1 | | | | | | 1 | | 1 | 1 | 1 |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | 2 | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | | | |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|-----------------------|------------------|
| | 0
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2
9 | 0
5
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4 | 0
7
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7
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9 | 0
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2
9 | 0
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0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
0
3
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2 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------------------------------|---|--|
| Adrenal Medulla
Hemorrhage
Hyperplasia
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | | |
| Islets, Pancreatic
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Pituitary Gland
Pars Distalis, Hyperplasia
Pars Intermedia, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 3 2 3 1 2 1 1 1 1 1 1 2 2 1 1 1 | | |
| Thyroid Gland
C-cell, Hyperplasia
Follicle, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 1 1 1 1 2 1 1 1 1 1 1 1 2 1 3 1 1 1 | 3 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Clitoral Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 | |
| Ovary
Cyst
Bursa, Dilatation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | X X |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
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Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

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First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------|----------------------|
| | 0
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0 | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
0
3
8
2 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland
Galactoceles
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin
Epidermis, Hyperplasia
Vein, Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone
Fracture | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Skeletal Muscle
Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain
Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung
Inflammation, Granulomatous
Inflammation, Chronic
Bronchiole, Hyperplasia
Serosa, Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

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Species/Strain: RATS/Wistar Han

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Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| Wistar Han Rats Female
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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6
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8 | 0
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6 | | 0
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8 | 0
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2
5 |
| ANIMAL ID | 0
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7 | 0
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|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|
| Adrenal Medulla Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 1.5 | |
| Hyperplasia | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 | |
| Inflammation, Suppurative | | | | | | 1 | 2 | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Islets, Pancreatic Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 1.0 | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 49 | | | |
| Pituitary Gland Pars Distalis, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 19 | 1.5 | |
| Pars Intermedia, Hyperplasia | 3 | 1 | 1 | | 1 | | 1 | 1 | | | | | 1 | | | 2 | | 1 | | | | 1 | 1 | 1.0 | | |
| Thyroid Gland C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 36 | 1.4 | |
| Follicle, Hyperplasia | 1 | 1 | 1 | | | | 2 | 2 | | | 2 | | 1 | 2 | 2 | 1 | | 2 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 3.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Clitoral Gland Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 5 | 1.2 |
| Ovary Cyst | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | 6 | |
| Bursa, Dilatation | X | | | | | | | | | | | X | | | X | X | | X | X | | X | | 8 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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Lab: BAT

| WISTAR HAN RATS FEMALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|---------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|--------|
| | 0728 | 0684 | 0730 | 0728 | 0688 | 0666 | 0666 | 0770 | 0443 | 0443 | 0777 | 0777 | 0777 | 0666 | 0777 | 0777 | 0777 | 0222 | 0222 | 0888 | 0999 | 0888 | 0777 | 0444 | | 0777 | 0666 | 0666 | |
| ANIMAL ID | 0041 | 0044 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | 0041 | |
| Rete Ovarii, Cyst | X | | | | | | | | | | | | X | | | | | | | | | | | | | | | | 6 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenomyosis | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Inflammation, Suppurative | | | | | 4 | | | | | | 1 | | | | | | | | | | | | | | | | | | 3 2.3 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Cervix, Hyperplasia, Stromal | | | | | 3 | | | | | 3 | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Endometrium, Hyperplasia, Adenomatous | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Endometrium, Hyperplasia, Cystic | 3 | 3 | 2 | | | | | 2 | 1 | | 2 | | | 1 | | | | | 1 | | | | | | | 2 | 3 | | 18 1.9 |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hematopoietic Cell Proliferation | | 3 | | 1 | 3 | 3 | 3 | | 3 | | | 1 | 3 | 1 | | 1 | | 1 | | | | | | | | | 3 | | 26 1.8 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | 2 | 2 | 1 | 1 | 3 | 3 | 4 | | 4 | 1 | 2 | 1 | | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | 45 1.8 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20320 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Tetrabromobisphenol A

CAS Number: 79-94-7

Date Report Requested: 01/23/2013

Time Report Requested: 15:06:23

First Dose M/F: 07/25/07 / 07/26/07

Lab: BAT

| WISTAR HAN RATS FEMALE
1000 mg/kg | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|----------|--|
| | 0
7
2
8 | 0
6
8
4 | 0
7
3
0 | 0
7
2
8 | 0
6
8
8 | 0
6
8
6 | 0
6
0
7 | 0
7
3
0 | 0
4
6
2 | 0
4
4
2 | 0
7
3
0 | 0
7
2
9 | 0
7
3
0 | 0
6
3
0 | 0
7
3
0 | 0
7
2
8 | 0
7
2
8 | 0
7
2
8 | 0
7
3
0 | 0
7
2
9 | 0
4
4
6 | 0
7
2
8 | 0
6
2
5 | | | |
| ANIMAL ID | 0
0
4
1
1 | 0
0
4
1
2 | 0
0
4
1
4 | 0
0
4
1
5 | 0
0
4
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6 | 0
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4
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7 | 0
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4
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8 | 0
0
4
1
9 | 0
0
4
2
0 | 0
0
4
2
1 | 0
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4
2
2 | 0
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4
2
3 | 0
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4
2
4 | 0
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4
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5 | 0
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4
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6 | 0
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2
7 | 0
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8 | 0
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9 | 0
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4
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4
3
1 | 0
0
4
3
2 | 0
0
4
3
3 | 0
0
4
3
4 | 0
0
4
3
5 | | |
| Mammary Gland
Galactoceles
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2
1 4.0 | | |
| Skin
Epidermis, Hyperplasia
Vein, Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 2.0
1 3.0 | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone
Fracture | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 4.0 | | |
| Skeletal Muscle
Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | 1
1 3.0 | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain
Compression | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
6 3.3 | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung
Inflammation, Granulomatous
Inflammation, Chronic
Bronchiole, Hyperplasia
Serosa, Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
4 1.3
1 1.0
1 1.0
1 3.0 | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
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