

Experiment Number: 50052 - 01
Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Ionic Liquid: N-Butylpyridinium Chloride
CAS Number: 1124-64-7

Date Report Requested: 01/08/2020
Time Report Requested: 11:03:57
First Dose M/F: 09/19/13 / 09/20/13
Lab: BAT

Final_1 - NBUPY Rats

NTP Study Number: C05052
Lock Date: 05/25/2018
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
MALE	2	2	2	2	2	2	2	2	2	2	2
0 mg/mL male	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0	
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
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* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. 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

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	* TOTALS
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2		
0 mg/mL male	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	7	7	7	7	7		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
Heart	+	+	+	+	+	+	+	+	+	+		10
ENDOCRINE SYSTEM												
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+		10
Parathyroid Gland	M	+	M	+	M	+	M	+	+	M		5
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		10
GENERAL BODY SYSTEM												
NONE												
GENITAL SYSTEM												
Epididymis	+	+	+	+	+	+	+	+	+	+		10
Preputial Gland	+	+	+	+	+	+	+	+	+	+		10
Prostate	+	+	+	+	+	+	+	+	+	+		10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+		10

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	* TOTALS
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2		
0 mg/mL male	0	0	0	0	0	0	0	0	0	0		
	7	7	7	7	7	7	7	7	7	7		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
Testis	+	+	+	+	+	+	+	+	+	+		10
HEMATOPOIETIC SYSTEM												
Bone Marrow	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+		10
Spleen	+	+	+	+	+	+	+	+	+	+		10
Thymus	+	+	+	+	+	+	+	+	+	+		10
INTEGUMENTARY SYSTEM												
Mammary Gland	+	+	+	+	+	+	+	+	+	+		10
Skin	+	+	+	+	+	+	+	+	+	+		10
MUSCULOSKELETAL SYSTEM												
Bone	+	+	+	+	+	+	+	+	+	+		10
NERVOUS SYSTEM												
Brain	+	+	+	+	+	+	+	+	+	+		10
RESPIRATORY SYSTEM												

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9			
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	0	0	0
0 mg/mL male	0	0	0	0	0	0	0	0	0	0	7	7	7
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Lung	+	+	+	+	+	+	+	+	+	+			10
Nose	+	+	+	+	+	+	+	+	+	+			10
Trachea	+	+	+	+	+	+	+	+	+	+			10
SPECIAL SENSES SYSTEM													
Eye	+	+	+	+	+	+	+	+	+	+			10
Harderian Gland	+	+	+	+	+	+	+	+	+	+			10
URINARY SYSTEM													
Kidney	+	+	+	+	+	+	+	+	+	+			10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+			10
SYSTEMIC LESIONS													
Multiple Organ	+	+	+	+	+	+	+	+	+	+			10

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DAY ON TEST

**HARLAN SPRAGUE DAWLEY RATS
MALE**

0.3 mg/mL male

ANIMAL ID

*** TOTALS**

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
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Lab: BAT

DAY ON TEST

**HARLAN SPRAGUE DAWLEY RATS
MALE**

0.3 mg/mL male

ANIMAL ID

*** TOTALS**

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

0

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HARLAN SPRAGUE DAWLEY RATS MALE 1 mg/mL 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
		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2	2	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	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3
		1	2	3	4	5	6	7	8	9	0								
* TOTALS																			

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Gut Associated Lymphoid Tissue

+

1

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1 mg/mL male	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	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
		7	7	7	7	7	7	7	7	7	7
		2	2	2	2	2	2	2	2	2	3
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

+

1

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
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A .. Autolysis precludes evaluation
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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	0	9	
MALE	2	2	2	2	2	2	2	2	6	2	
3 mg/mL male	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	
	3	3	3	3	3	3	3	3	3	3	
	1	2	3	4	5	6	7	8	9	4	
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
--------------	---	---	---	---	---	---	---	---	---	---	-----------

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	0	9			
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	6	2			
3 mg/mL male	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	7	7	7	7	7			
	3	3	3	3	3	3	3	3	3	4			
	1	2	3	4	5	6	7	8	9	0			
												* TOTALS	
Heart	+	+	+	+	+	+	+	+	+	+			10
ENDOCRINE SYSTEM													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+			10
Parathyroid Gland	M	+	M	M	+	+	M	+	+	+			6
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+			10
GENERAL BODY SYSTEM													
NONE													
GENITAL SYSTEM													
Epididymis	+	+	+	+	+	+	+	+	+	+			10
Preputial Gland	+	+	+	+	+	+	+	+	+	+			10
Prostate	+	+	+	+	+	+	+	+	+	+			10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+			10

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	* TOTALS
	9	9	9	9	9	9	9	9	0	9		
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	6	2		
3 mg/mL male	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	7	7	7	7	7		
	3	3	3	3	3	3	3	3	3	4		
	1	2	3	4	5	6	7	8	9	0		
Testis	+	+	+	+	+	+	+	+	+	+		10
HEMATOPOIETIC SYSTEM												
Bone Marrow	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+		10
Spleen	+	+	+	+	+	+	+	+	+	+		10
Thymus	+	+	+	+	+	+	+	+	+	+		10
INTEGUMENTARY SYSTEM												
Mammary Gland	+	+	+	+	M	+	+	+	M	+		8
Skin	+	+	+	+	+	+	+	+	+	+		10
MUSCULOSKELETAL SYSTEM												
Bone	+	+	+	+	+	+	+	+	+	+		10
NERVOUS SYSTEM												
Brain	+	+	+	+	+	+	+	+	+	+		10
RESPIRATORY SYSTEM												

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 3 mg/mL male	DAY ON TEST										* TOTALS
	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	
ANIMAL ID	0 7 3 1	0 7 3 2	0 7 3 3	0 7 3 4	0 7 3 5	0 7 3 6	0 7 3 7	0 7 3 8	0 7 3 9	0 7 3 0	
	Lung	+	+	+	+	+	+	+	+	+	+
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urethra									+		1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. 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

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS FEMALE	9	9	9	9	9	9	9	9	9	9
	2	2	2	2	2	2	2	2	2	2
0 mg/mL female	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
--------------	---	---	---	---	---	---	---	---	---	---	-----------

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	0	0	0	0	0	0	0	0	0	0			
HARLAN SPRAGUE DAWLEY RATS	9	9	9	9	9	9	9	9	9	9			
FEMALE	2	2	2	2	2	2	2	2	2	2			
0 mg/mL female	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	7	7	7	7	7			
	4	4	4	4	4	4	4	4	4	5			
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Heart	+	+	+	+	+	+	+	+	+	+			10
ENDOCRINE SYSTEM													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+			10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+			10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+			10
GENERAL BODY SYSTEM													
NONE													
GENITAL SYSTEM													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+			10
Ovary	+	+	+	+	+	+	+	+	+	+			10
Uterus	+	+	+	+	+	+	+	+	+	+			10
HEMATOPOIETIC SYSTEM													

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9			
HARLAN SPRAGUE DAWLEY RATS FEMALE	2	2	2	2	2	2	2	2	2	2	7	7	7
0 mg/mL female	4	4	4	4	4	4	4	4	4	4	1	2	3
	1	2	3	4	5	6	7	8	9	0	* TOTALS		
Bone Marrow	+	+	+	+	+	+	+	+	+	+			10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+			10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+			10
Spleen	+	+	+	+	+	+	+	+	+	+			10
Thymus	+	+	+	+	+	+	+	+	+	+			10
INTEGUMENTARY SYSTEM													
Mammary Gland	+	+	+	+	+	+	+	+	+	+			10
Skin	+	+	+	+	+	+	+	+	+	+			10
MUSCULOSKELETAL SYSTEM													
Bone	+	+	+	+	+	+	+	+	+	+			10
NERVOUS SYSTEM													
Brain	+	+	+	+	+	+	+	+	+	+			10
RESPIRATORY SYSTEM													
Lung	+	+	+	+	+	+	+	+	+	+			10
Nose	+	+	+	+	+	+	+	+	+	+			10

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS FEMALE	2	2	2	2	2	2	2	2	2	2	
0 mg/mL female											
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	
	4	4	4	4	4	4	4	4	4	5	
	1	2	3	4	5	6	7	8	9	0	
	* TOTALS										
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9											
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	0.3 mg/mL female	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7											
	5	5	5	5	5	5	5	5	5	5											
	1	2	3	4	5	6	7	8	9	0											
																			* TOTALS		

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Spleen	+	1
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INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0.3 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	* TOTALS
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		2	2	2	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	
		7	7	7	7	7	7	7	7	7	7	
		5	5	5	5	5	5	5	5	5	6	
		1	2	3	4	5	6	7	8	9	0	

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

+

1

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		2	2	2	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	
		7	7	7	7	7	7	7	7	7	7	
		6	6	6	6	6	6	6	6	7	7	
		1	2	3	4	5	6	7	8	9	0	

* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Uterus

+

1

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	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
		7	7	7	7	7	7	7	7	7	7
		6	6	6	6	6	6	6	6	7	7
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

+

1

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 3 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	
		7	7	7	7	7	7	7	7	8	
		1	2	3	4	5	6	7	8	9	
											* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
--------------	---	---	---	---	---	---	---	---	---	---	-----------

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9			
HARLAN SPRAGUE DAWLEY RATS FEMALE	2	2	2	2	2	2	2	2	2	2	7	7	7
3 mg/mL female	1	2	3	4	5	6	7	8	9	0	1	2	3
													* TOTALS
Heart	+	+	+	+	+	+	+	+	+	+			10
ENDOCRINE SYSTEM													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+			10
Parathyroid Gland	+	+	+	+	+	+	+	+	M	M			8
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+			10
GENERAL BODY SYSTEM													
NONE													
GENITAL SYSTEM													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+			10
Ovary	+	+	+	+	+	+	+	+	+	+			10
Uterus	+	+	+	+	+	+	+	+	+	+			10
HEMATOPOIETIC SYSTEM													

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

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

Experiment Number: 50052 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Ionic Liquid: N-Butylpyridinium Chloride

CAS Number: 1124-64-7

Date Report Requested: 01/08/2020

Time Report Requested: 11:03:57

First Dose M/F: 09/19/13 / 09/20/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS FEMALE	2	2	2	2	2	2	2	2	2	2	
3 mg/mL female											
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	
	7	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0	
	* TOTALS										
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue

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