Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD

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

## Ionic liquid Toxicity CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA

NTP Study Number:	C05049		
Lock Date:	12/04/2009		
Cage Range:	ALL		
Date Range:	ALL		
Reasons For Removal:	ALL		
Removal Date Range:	ALL		
Treatment Groups:	Include 001 Control Male	Include 012 1.0 mg/ml NBuPy	Include 013 3.0 mg/ml NBuPy
	Include 014 6.0 mg/ml NBuPy	Include 015 Control Female	Include 026 1.0 mg/ml NBuPy
	Include 027 3.0 mg/ml NBuPy	Include 028 6.0 mg/ml NBuPy	
Study Gender:	Both		
TDMSE Version:	3.0.2.3_002		
PWG Approval Date:	NONE		

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD

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

Ionic liquid Toxicity

CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA

Harlan Sprague Dawley RATS MALE	Control Male	1.0 mg/ml NBuPy	3.0 mg/ml NBuPy	6.0 mg/ml NBuPy	
Disposition Summary					
Animals Initially In Study Early Deaths Survivors	10	5	5	5	
Terminal Sacrifice	10	5	5	5	
Animals Examined Microscopically	10	5	5	5	
ALIMENTARY SYSTEM					
Intestine Small, Duodenum	(10)	(0)	(0)	(5)	
Intestine Small, Ileum	(10)	(0)	(0)	(5)	
Intestine Small, Jejunum	(10)	(0)	(0)	(5)	
Liver	(10)	(5)	(5)	(5)	
Depletion Glycogen			1 (20%)	4 (80%)	
Stomach, Forestomach	(10)	(0)	(0)	(5)	
Stomach, Glandular	(10)	(0)	(0)	(5)	
CARDIOVASCULAR SYSTEM					
Heart	(10)	(0)	(0)	(5)	
Cardiomyopathy	8 (80%)	( )	( )	4 (80%)	
ENDOCRINE SYSTEM				·	
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Testes	(10)	(0)	(0)	(5)	
a - Number of animals examined microscopi					

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD	P03: INCIDENCE I	Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA			
Harlan Sprague Dawley RATS MALE	Control Male	1.0 mg/ml NBuPy	3.0 mg/ml NBuPy	6.0 mg/ml NBuPy	
HEMATOPOIETIC SYSTEM					
Spleen Thymus Necrosis	(10) (10)	(0) (0)	(0) (5)	(5) (5) 1 (20%)	
INTEGUMENTARY SYSTEM					
None					
MUSCULOSKELETAL SYSTEM			·	·	
None					
NERVOUS SYSTEM					
Brain	(10)	(0)	(0)	(5)	
RESPIRATORY SYSTEM					
Lung Metaplasia, Osseous	(10) 1 (10%)	(0)	(0)	(5)	
SPECIAL SENSES SYSTEM					
None					
URINARY SYSTEM					· · · · · · · · · · · · · · · · · · ·
Kidney	(10)	(0)	(0)	(5)	

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

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD	P03: INCIDENCE R	Ionic liqui	LASTIC LESIONS BY id Toxicity IONICLIQUIDS	Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA
Harlan Sprague Dawley RATS MALE	Control Male	1.0 mg/ml NBuPy		

\*\*\* END OF MALE \*\*\*

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD

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

Ionic liquid Toxicity

CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA

Harlan Sprague Dawley RATS FEMALE	Control Female	1.0 mg/ml NBuPy	3.0 mg/ml NBuPy	6.0 mg/ml NBuPy	
Disposition Summary					
Animals Initially In Study Early Deaths Survivors	10	5	5	5	
Terminal Sacrifice	10	5	5	5	
Animals Examined Microscopically	10	5	5	5	
ALIMENTARY SYSTEM					
Intestine Small, Duodenum	(10)	(0)	(0)	(5)	
Intestine Small, Ileum	(10)	(0)	(0)	(5)	
Intestine Small, Jejunum	(10)	(0)	(0)	(5)	
Liver	(10)	(0)	(5)	(5)	
Depletion Glycogen				1 (20%)	
Stomach, Forestomach	(10)	(0)	(0)	(5)	
Stomach, Glandular	(10)	(0)	(0)	(5)	
CARDIOVASCULAR SYSTEM					
Heart	(10)	(0)	(0)	(5)	
Cardiomyopathy	10 (100%)	(-)	(-)	5 (100%)	
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Ovary	(10)	(0)	(0)	(5)	
a - Number of animals examined microscop				(~)	

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER Species/Strain: RATS/HSD	P03: INCIDENCE F	Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09 Lab: MBA			
Harlan Sprague Dawley RATS FEMALE	Control Female	1.0 mg/ml NBuPy	3.0 mg/ml NBuPy	6.0 mg/ml NBuPy	
HEMATOPOIETIC SYSTEM					
Spleen	(10)	(0)	(5)	(5)	
Depletion Cellular	(		(-)	1 (20%)	
Thymus	(10)	(0)	(5)	(5)	
Atrophy Necrosis				1 (20%) 3 (60%)	
INTEGUMENTARY SYSTEM					
None					
MUSCULOSKELETAL SYSTEM				·	
None					
NERVOUS SYSTEM					
Brain	(10)	(0)	(0)	(5)	
RESPIRATORY SYSTEM					
Lung	(10)	(0)	(0)	(5)	
SPECIAL SENSES SYSTEM					
None					
URINARY SYSTEM					· · · · · · · · · · · · · · · · · · ·
Kidney	(10)	(0)	(0)	(5)	
a - Number of animals examined microsco				(3)	

Experiment Number: 05049 - 03 Test Type: 14-DAY Route: DOSED WATER	P03: INCIDENCE R	ATES OF NON-NEOP Ionic liqu CAS Number:	Date Report Requested: 04/24/2020 Time Report Requested: 12:10:10 First Dose M/F: 03/09/09 / 03/10/09		
Species/Strain: RATS/HSD					Lab: MBA
Harlan Sprague Dawley RATS FEMALE	Control Female	1.0 mg/ml NBuPy	3.0 mg/ml NBuPy		

\*\*\* END OF REPORT \*\*\*