Experiment Number: 20606-99 Test Type: 18-33 DAYS Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: Mouse/BALB/C	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Test Compound: 2,3 butanedione CAS Number: 431-03-8	Date Report Requested: 10/23/2014 Time Report Requested: 14:03:14 First Dose M/F: NA / NA Lab: VCU
C Number:	120606	
Lock Date:	02/12/2009	
Cage Range:	All	
Date Range:	All	
Reasons For Removal:	All	
Removal Date Range:	All	
Treatment Groups:	All	
Study Gender:	Female	
PWG Approval Date	NONE	

Species/Strain: Mouse/BALB/C	CAS Number: 431-03-8				Lab: VCU
BALB/C Mouse FEMALE	Air Control	DA 25-ppm	DA 50-ppm	DA 100-ppm	_
Disposition Summary					_
Animals Initially In Study	5	5	6	6	
Early Deaths					
Survivors					
Terminal Sacrifice	5	5	6	6	
Animals Examined Microscopically	5	5	6	6	_
ALIMENTARY SYSTEM					
Liver	(5)	(5)	(6)	(6)	
Inflammation, Chronic	4 [1.0]	4 [1.0]	5 [1.0]	3 [1.0]	_
CARDIOVASCULAR SYSTEM None					_
ENDOCRINE SYSTEM					
None					_
GENERAL BODY SYSTEM					
None				·	_
GENITAL SYSTEM					
None					_
HEMATOPOIETIC SYSTEM					
Bronchial Associated Lymphoid Tissue	(3)	(5)	(5)	(6)	
Lymph Node, Bronchial	(3)	(4)	(4)	(6)	
Lymph Node, Mediastinal	(3)	(1)	(2)	(1)	
Spleen	(5)	(5)	(6)	(6)	
Follicles, Germ center, Increased Number				2 [1.0]	
Marginal Zone, Increased Size			2 [1.0]	3 [1.7]	
PeriLympSheath, Decreased Number, Lymphocyte		1 [1.0]	2 [1.0]	2 [1.0]	

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/23/2014 Time Report Requested: 14:03:14

Test Compound: 2,3 butanedione

Time Report Requested: 14:03:14

First Dose M/F: NA / NA

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20606-99

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 18-33 DAYS

Experiment Number: 20606-99

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 10/23/2014 AVERAGE SEVERITY GRADES[b] Time Report Requested: 14:03:14

Test Type: 18-33 DAYS Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/BALB/C

Test Compound: 2,3 butanedione

CAS Number: 431-03-8

Time Report Requested: 10/23/201 Time Report Requested: 14:03:14 First Dose M/F: NA / NA Lab: VCU

BALB/C Mouse FEMALE	Air Control	DA 25-ppm	DA 50-ppm	DA 100-ppm
PeriLympSheath, Decreased Size		2 [1.5]	3 [1.0]	4 [1.8]
PeriLympSheath, Increased Number, Apoptotic Cel		1 [1.0]	1 [1.0]	
PeriLympSheath, Increased Number, Pig Macrophag			1 [1.0]	
Red Pulp, Decreased Size			3 [1.0]	4 [1.0]
Red Pulp, Increased Number, Hemat Cells			2 [1.5]	
Thymus	(5)	(5)	(6)	(6)
Cortex, Decreased Number, Lymphocyte		2 [1.0]	2 [1.0]	3 [1.3]
Cortex, Decreased Size		1 [1.0]	2 [2.0]	3 [1.3]
Cortex, Extramedullary Hematopoiesis			1 [1.0]	
Cortex, Increased Number, Apoptotic Cel		3 [1.0]	6 [1.0]	1 [1.0]
Cortex, Increased Number, Lymphoblasts			2 [1.0]	2 [1.5]
Cortex, Increased Number, Ting Body Macr		1 [1.0]	5 [1.2]	
Decreased Cortex Medulla Ratio			1 [3.0]	
Medulla, Extramedullary Hematopoiesis	1 [1.0]			
Medulla, Increased Number, Lymphocyte			3 [1.3]	5 [1.6]
Medulla, Increased Size		1 [1.0]	1 [1.0]	2 [1.0]
NTEGUMENTARY SYSTEM				
None				
USCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
Lung	(5)	(5)	(6)	(6)
Bronchus, Epithelium, Regeneration			1 [1.0]	4 [1.5]
Bronchus, Inflammation, Chronic Active			5 [1.0]	4 [1.0]

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20606-99 Test Type: 18-33 DAYS Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: Mouse/BALB/C	Type: 18-33 DAYS AVERAGE SEVERITY GRADES[b] e: RESPIRATORY EXPOSURE WHOLE BODY Test Compound: 2,3 butanedione				
BALB/C Mouse FEMALE	Air Control	DA 25-ppm	DA 50-ppm	DA 100-ppm	
Trachea	(1)	(0)	(2)	(1)	
SPECIAL SENSES SYSTEM None					
URINARY SYSTEM None					

** END OF REPORT **

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)