Test Type: 18-33 DAYS

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/BALB/C

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

CAS Number: 431-03-8

Date Report Requested: 10/23/2014 Time Report Requested: 14:03:34

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:

Removal Date Range: All

Treatment Groups: All

Study Gender: Female

PWG Approval Date NONE

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

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

CAS Number: 431-03-8

Lab: VCU

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

Species/Strain: Mouse/BALB/C

DAY ON TES	$ST \mid \theta$	0	0	0	0
BALB/C Mouse Female	$\begin{vmatrix} 0 \\ 2 \end{vmatrix}$	0 2	0	0 2	0
Air Control	$\frac{2}{5}$	5	5	5	5
ANIMAL	$ID \begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	0	0	0
	Ŏ	ŏ	Ö	Ö	Ö
	0	0	0	2	3
	1 0		. 9	· U	ו כ

*TOTALS

Alimentary System

Liver + + + + + 5

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bronchial Associated Lymphoid Tissue	+	+	+	M	M	3
Lymph Node, Bronchial	+	M	M	+	+	3
Lymph Node, Mediastinal	M	+	M	+	+	3
Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5

Integumentary System

NONE

I ..Insufficient tissue

M ..Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X ..Lesion present

Test Type: 18-33 DAYS

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/BALB/C

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione **CAS Number:** 431-03-8

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

Lab: VCU

DAY ON TEST	0	0	0	0	0	
BALB/C Mouse Female	0 2	$\begin{vmatrix} 0 \\ 2 \end{vmatrix}$				
Air Control	5	5	5	5	5	
ANIMAL ID	0 0	0	0	0	0	
AMINALID			0	0	0	
	0	0	0	0	0	
	0	0	0	2	3	
	6	7	9	0	5	

*TOTALS

5

5

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung	+	+	+	+	+
Trachea	+	M	M	М	M

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X ..Lesion present

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

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

CAS Number: 431-03-8

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

Lab: VCU

Species/Strain: Mouse/BALB/C

DAY ON TEST	0	0	0	0	0
BALB/C Mouse Female	0	0	0	0	0
	2	2		2	2
DA 25-ppm	5	5	5	5	5
	0	0	0	0	0
ANIIVIAL IL	' o	0	0	0	0
	0	0	0	0	0
	1	3	3	4	5
	6	1	3	5	6

*TOTALS

5

Alimentary System

Liver + + + + +

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bronchial Associated Lymphoid Tissue	+	+	+	+	+	5
Lymph Node, Bronchial	+	+	M	+	+	4
Lymph Node, Mediastinal	M	М	M	+	М	1
Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5

Integumentary System

NONE

I .. Insufficient tissue

M ..Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X ..Lesion present

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: 18-33 DAYS

Test Compound: 2,3 butanedione **CAS Number:** 431-03-8

Route: RESPIRATORY EXPOSURE WHOLE BODY

Time Report Requested: 14:03:34

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Lab: VCU

Species/Strain: Mouse/BALB/C

DAY ON TE	EST 0	0	0	0	0	0	
BALB/C Mouse Female		~	0	0 2	0	<i>0</i> 2	
DA 25-ppm	5	5	$\frac{2}{5}$	5	$\frac{2}{5}$	5	
ANIMAI	LID	-	0	0	0	0	
		0	0	0	0	0	
	1	1	3	3	4	5	l
	6	6 I	1	3	5	6	ı

*TOTALS

5 0

5

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung	+	+	+	+	+	
Trachea	M	M	M	М	M	(

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X ..Lesion present

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

Route: RESPIRATORY EXPOSURE WHOLE BODY

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

CAS Number: 431-03-8

Lab: VCU

Species/Strain: Mouse/BALB/C

Test Type: 18-33 DAYS

D	AY ON TEST	0	0	0	0	0	0	
BALB/C Mouse Female		0	0	0	0	0	$\begin{vmatrix} 0 \\ 2 \end{vmatrix}$	
DA 50-ppm		5	5	5	5	5	5	
••	ANIMAL ID	0	0	0	0	0	0	
		0	0	Ö	0	0	0	
		0	1	4	5	6	8	l

*TOTALS

Alimentary System

Liver + + + + + +

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bronchial Associated Lymphoid Tissue	+	+	M	+	+	+	5
Lymph Node, Bronchial	+	M	M	+	+	+	4
Lymph Node, Mediastinal	+	M	M	+	М	М	2
Spleen	+	+	+	+	+	+	6
Thymus	+	+	+	+	+	+	6

Integumentary System

NONE

I .. Insufficient tissue

M ..Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X ..Lesion present

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

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

CAS Number: 431-03-8

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

Lab: VCU

Species/Strain: Mouse/BALB/C

	DAY ON TEST	0	0	0	0	0	0	
BALB/C Mouse Female	•	0	0	<i>0</i> 2	0	0	0 2	
DA 50-ppm		5	5	5	5	5	5	
ANIMAL ID	0	0	0	0	0	0		
		Õ	0	0	0	0	0	
		0	1	4	5 2	6 4	8 4	

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung + + + + + + + Trachea + + M M M M

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

X ..Lesion present

I .. Insufficient tissue

M ..Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione

Test Type: 18-33 DAYS

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/BALB/C

CAS Number: 431-03-8

First Dose M/F: NA / NA

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

Lab: VCU

BALB/C Mouse Female
DA 100-ppm

DAY ON TEST 0 0 0 0 0 0 0 0 0 0 2 5 2 5 2 5 2 5 2 5 *2 5* 0 0 0 0 0 0 0 0 2 5 ANIMAL ID Õ 0 0 0 0 2 2 0 0 0 2 7 4 4 6

*TOTALS

Alimentary System

Liver + + + + + + 6

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bronchial Associated Lymphoid Tissue	+	+	+	+	+	+	6
Lymph Node, Bronchial	+	+	+	+	+	+	6
Lymph Node, Mediastinal	M	М	M	+	M	M	1
Spleen	+	+	+	+	+	+	6
Thymus	+	+	+	+	+	+	6

Integumentary System

NONE

I .. Insufficient tissue

M ..Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 2,3 butanedione **CAS Number:** 431-03-8

Route: RESPIRATORY EXPOSURE WHOLE BODY

Date Report Requested: 10/23/2014

Time Report Requested: 14:03:34

First Dose M/F: NA / NA

Lab: VCU

Species/Strain: Mouse/BALB/C

Test Type: 18-33 DAYS

BALB/C Mouse Female DA 100-ppm

DAY ON TEST 0 0 0 0 0 0 0 0 0 2 5 2 5 2 5 2 5 *2 5 2 5* 0 0 0 0 0 0 0 2 5 0 ANIMAL ID 0 0 0 0 0 2 2 0 0 0 2 7 4 6 4

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung Trachea M M M M

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

** END OF REPORT **

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..}Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue