

Experiment Number: 88038-01
Test Type: 90-DAY
Route: DOSED WATER
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Glyoxal
CAS Number: 107-22-2

Date Report Requested: 10/17/2014
Time Report Requested: 13:23:41
First Dose M/F: NA / NA
Lab: SRI

C Number:	C88038
Lock Date:	01/24/1992
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

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 Lab: SRI

**F 344/N Rat Male
 VEHICLE CONTROL**

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
	9	9	9	9	9	9	9	9	9	9	9
	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	0	0	0	0	0	0	1	0
	1	2	3	4	5	6	7	8	9		

*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	M	9
Intestine Large, Colon	+	+	+	+	+	+	+	M	+	+	9
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	M	+	+	+	+	9
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
VEHICLE CONTROL

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	2	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	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	+	+	+	+	M	+	+	+	+	+	9
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Male
 VEHICLE CONTROL**

	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	
Bone	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
NONE											
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
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 BLANK ..Not examined microscopically

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Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:41

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
1 MG/ML

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
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	----

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
------------------------	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
------------------------	---	---	---	---	---	---	---	---	---	---	----

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

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

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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BLANK ..Not examined microscopically

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Time Report Requested: 13:23:41

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
1 MG/ML

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
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

NONE
Respiratory System

NONE
Special Senses System

NONE
Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
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SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	----

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

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Species/Strain: Rat/F 344/N

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Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:41

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
2 MG/ML

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
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	3	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver											1
Mesentery			+								1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node, Mandibular	M	+	I	+	+	+	+	+	+	+	8
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

NONE

Musculoskeletal 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: 88038-01
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 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Glyoxal
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Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:41
 First Dose M/F: NA / NA
 Lab: SRI

F 344/N Rat Male
 2 MG/ML

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
	9	9	9	9	9	9	9	9	9	9	9
	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
	2	2	2	2	2	2	2	2	2	3	3
	1	2	3	4	5	6	7	8	9	0	0
	*TOTALS										

NONE
 Nervous System

NONE
 Respiratory System

NONE
 Special Senses System

NONE
 Urinary System

Kidney + + + + + + + + + + 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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:41

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
4 MG/ML

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
	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
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Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
------------------------	---	---	---	---	---	---	---	---	---	---	----

Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
------------------------	---	---	---	---	---	---	---	---	---	---	----

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous 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: 88038-01
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:41
 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Male
 4 MG/ML**

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
	9	9	9	9	9	9	9	9	9	9	9
	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
	3	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

NONE											
Respiratory System											
NONE											
Special Senses System											
NONE											
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:41

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
8 MG/ML

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
	0	0	0	0	0	0	0	0	0	0
	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	+	+	+	+	+	+	+	+	+	M	9
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Mesentery		+									1
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	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

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 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:41
 First Dose M/F: NA / NA
 Lab: SRI

F 344/N Rat Male
8 MG/ML

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0	*TOTALS
	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	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	5	0	
	1	2	3	4	5	6	7	8	9	0											
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+											10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+											10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+											10
General Body System																					
NONE																					
Genital System																					
Epididymis	+	+	+	+	+	+	+	+	+	+											10
Preputial Gland	+	+	+	+	+	+	+	+	+	+											10
Prostate	+	+	+	+	+	+	+	+	+	+											10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+											10
Testes	+	+	+	+	+	+	+	+	+	+											10
Hematopoietic System																					
Bone Marrow	+	+	+	+	+	+	+	+	+	+											10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+											10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+											10
Spleen	+	+	+	+	+	+	+	+	+	+											10
Thymus	+	+	+	+	+	+	+	+	+	+											10
Integumentary System																					
Mammary Gland	+	+	+	+	+	M	+	+	M	M											7
Skin	+	+	+	+	+	+	+	+	+	+											10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:42
 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Male
 8 MG/ML**

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
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Musculoskeletal System

Bone + + + + + + + + + + 10

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

NONE

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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
16 MG/ML

DAY ON TEST	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
	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
	5	5	5	5	5	5	5	5	5	6
	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	+	+	M	+	+	+	+	+	+	+	9
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
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male
16 MG/ML

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	*TOTALS
	0	0	0	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1	1	1	1		
	2	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	0	0		
	0	0	0	0	0	0	0	0	0	0		
	5	5	5	5	5	5	5	5	5	6		
	1	2	3	4	5	6	7	8	9	0		
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		10
General Body System												
NONE												
Genital System												
Epididymis	+	+	+	+	+	+	+	+	+	+		10
Preputial Gland	+	+	+	+	+	+	+	+	+	+		10
Prostate	+	+	+	+	+	+	+	+	+	+		10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+		10
Testes	+	+	+	+	+	+	+	+	+	+		10
Hematopoietic System												
Bone Marrow	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+		10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+		10
Spleen	+	+	+	+	+	+	+	+	+	+		10
Thymus	+	+	+	+	+	+	+	+	+	+		10
Integumentary System												
Mammary Gland	+	+	+	I	M	M	+	+	+	+		7
Skin	+	+	+	+	+	+	+	+	+	+		10
Musculoskeletal 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: 88038-01
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:42
 First Dose M/F: NA / NA
 Lab: SRI

F 344/N Rat Male
16 MG/ML

	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	*TOTALS
	1	2	2	2	2	2	2	2	2	2	
Bone	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
NONE											
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
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

Experiment Number: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
VEHICLE CONTROL

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
	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	M	+	+	+	+	+	+	+	9
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	M	+	+	+	+	+	9
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
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
VEHICLE CONTROL

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	6	6	6	6	7	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	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

* ..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: 88038-01
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:42
 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Female
 VEHICLE CONTROL**

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
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

NONE

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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
1 MG/ML

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
	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	8	8
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver + + 2

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Ovary + 1

Uterus + + 2

Hematopoietic System

Lymph Node, Mesenteric + + + + + + + + + + 10

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous 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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
2 MG/ML

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
	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	0
	8	8	8	8	8	8	8	8	8	9
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver + 1

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Ovary + 1

Uterus + 1

Hematopoietic System

Lymph Node, Mesenteric + + + + + + + + + + 10

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous 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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
4 MG/ML

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
	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	1
	9	9	9	9	9	9	9	9	9	0
	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 + + + 3

Hematopoietic System

Lymph Node, Mesenteric + + + + + + + + + 10

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous 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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
4 MG/ML

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
	3	3	3	3	3	3	3	3	3	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	0	0	0	0	0	1
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Respiratory System

Lung + 1

Special Senses System

NONE

Urinary System

NONE

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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
8 MG/ML

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
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	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
	1	1	1	1	1	1	1	1	1	1	1
	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	+	+	+	+	+	M	+	+	+	+	9
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
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	M	+	+	+	+	9

* ..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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
8 MG/ML

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	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	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	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

* ..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: 88038-01
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:42
 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Female
 8 MG/ML**

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
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	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
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

NONE

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: 88038-01
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal
 CAS Number: 107-22-2

Date Report Requested: 10/17/2014
 Time Report Requested: 13:23:42
 First Dose M/F: NA / NA
 Lab: SRI

**F 344/N Rat Female
 16 MG/ML**

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
	1	1	1	1	1	1	1	1	1	1	1
	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
	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	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
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
16 MG/ML

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	2	2	2	2	2	2	
Pituitary Gland	0	0	0	0	0	0	0	0	0	0	10
Thyroid Gland	0	0	0	0	0	0	0	0	0	0	10
General Body System											
NONE											
Genital System											
Clitoral Gland	1	1	1	1	1	1	1	1	1	1	10
Ovary	1	1	1	1	1	1	1	1	1	1	10
Uterus	1	1	1	1	1	1	1	1	1	1	10
Hematopoietic System											
Bone Marrow	1	1	1	1	1	1	1	1	1	1	10
Lymph Node, Mandibular	1	1	1	1	1	1	1	1	1	1	10
Lymph Node, Mesenteric	1	1	1	1	1	1	1	1	1	1	10
Spleen	1	1	1	1	1	1	1	1	1	1	10
Thymus	1	1	1	1	1	1	1	1	1	1	10
Integumentary System											
Mammary Gland	1	1	1	1	1	M	1	1	1	M	8
Skin	1	1	1	1	1	1	1	1	1	1	10
Musculoskeletal System											
Bone	1	1	1	1	1	1	1	1	1	1	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: 88038-01

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Glyoxal

CAS Number: 107-22-2

Date Report Requested: 10/17/2014

Time Report Requested: 13:23:42

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female
16 MG/ML

DAY ON TEST	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
	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
	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Nervous System

Brain	+	+	+	+	+	+	+	+	+	+	10
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Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

Nose	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

Trachea	+	+	+	+	+	+	+	+	+	+	10
---------	---	---	---	---	---	---	---	---	---	---	----

Special Senses System

NONE

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