Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

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:

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF GLYOXAL

MALE MOUSE

Experiment Number: 88038-02

Species/Strain: Mouse/B6C3F1

Test Type: 90-DAY

Route: DOSED WATER

OrganMorphologyLiverNecrosisInflammation Acute

Salivary Glands: Submandibul GI

Skin

Depletion Secretory
Inflammation Acute

Stomach, Glandular Erosion

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Liver						
Inflammation Acute						
LESION RATES						
OVERALL(a)	1/10 (10%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	1/1.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	100%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	94(T)	94(T)				
STATISTICAL TESTS						
POLY 3	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
POLY 1.5	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
POLY 6	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.167N	P=0.182	(e)	(e)	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	P=0.022*	(e)	(e)	(e)	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014
Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Liver						
Necrosis						
LESION RATES						
OVERALL(a)	1/10 (10%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	1/1.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	100%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	94(T)	94(T)				
STATISTICAL TESTS						
POLY 3	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
POLY 1.5	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
POLY 6	(e)	P=0.146	(e)	(e)	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.167N	P=0.182	(e)	(e)	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	P=0.022*	(e)	(e)	(e)	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

MALE								
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML		
Pancreas: Acinus								
Depletion Secretory								
LESION RATES								
OVERALL(a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/9 (0%)		
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/9.00		
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%		
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/9 (0%)		
FIRST INCIDENCE	94(T)							
STATISTICAL TESTS								
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.521N		
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.521N		
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.521N		
COCH-ARM / FISHERS	P=0.323N	(e)	(e)	(e)	(e)	P=0.526N		
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.179N		
HISTCONT SAME RTE								
HISTCONT ALL RTES								
CURR VS HC SAME RTE								
CURR VS HC ALL RTES								

Test Type: 90-DAY Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Salivary Glands: Submandib	ul Gl					
Depletion Secretory						
LESION RATES						
OVERALL(a)	2/10 (20%)	6/10 (60%)	8/10 (80%)	6/10 (60%)	7/10 (70%)	3/10 (30%)
POLY-3 RATE (b)	2/10.00	6/10.00	8/10.00	6/10.00	7/10.00	3/10.00
POLY-3 PERCENT (g)	20%	60%	80%	60%	70%	30%
TERMINAL (d)	2/10 (20%)	6/10 (60%)	8/10 (80%)	6/10 (60%)	7/10 (70%)	3/10 (30%)
FIRST INCIDENCE	94(T)	94(T)	94(T)	94(T)	94(T)	94(T)
STATISTICAL TESTS						
POLY 3	P=0.287N	P=0.077	P=0.004**	P=0.077	P=0.024*	P=0.500
POLY 1.5	P=0.287N	P=0.077	P=0.004**	P=0.077	P=0.024*	P=0.500
POLY 6	P=0.287N	P=0.077	P=0.004**	P=0.077	P=0.024*	P=0.500
COCH-ARM / FISHERS	P=0.297N	P=0.085	P=0.012*	P=0.085	P=0.035*	P=0.500
MAX-ISO-POLY-3	P=0.054	P=0.029*	P<0.001**	P=0.029*	P=0.007**	P=0.311
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

	MALE								
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML			
Skin									
Inflammation Acute									
LESION RATES									
OVERALL(a)	0/10 (0%)	0/0 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
POLY-3 RATE (b)	0/10.00	0/0.00	1/1.00	0/0.00	0/0.00	0/10.00			
POLY-3 PERCENT (g)	0%	0%	100%	0%	0%	0%			
TERMINAL (d)	0/10 (0%)	0/0 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
FIRST INCIDENCE			94(T)						
STATISTICAL TESTS									
POLY 3	(e)	(e)	P=0.091	(e)	(e)	(e)			
POLY 1.5	(e)	(e)	P=0.091	(e)	(e)	(e)			
POLY 6	(e)	(e)	P=0.091	(e)	(e)	(e)			
COCH-ARM / FISHERS	P=0.412N	(e)	P=0.091	(e)	(e)	(e)			
MAX-ISO-POLY-3	(e)	(e)	P=0.000**	(e)	(e)	(e)			
HISTCONT SAME RTE									
HISTCONT ALL RTES									
CURR VS HC SAME RTE									
CURR VS HC ALL RTES									

Test Type: 90-DAY

Species/Strain: Mouse/B6C3F1

Route: DOSED WATER

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Stomach, Glandular						
Cyst						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/1 (0%)	0/4 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/1.00	0/4.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/1 (0%)	0/4 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE						94(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.240	(e)	(e)	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Stomach, Glandular						
Erosion						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/1 (0%)	2/4 (50%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/1.00	2/4.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	50%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/1 (0%)	2/4 (50%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE			94(T)			
STATISTICAL TESTS						
POLY 3	(e)	(e)	P=0.029*	(e)	(e)	(e)
POLY 1.5	(e)	(e)	P=0.029*	(e)	(e)	(e)
POLY 6	(e)	(e)	P=0.029*	(e)	(e)	(e)
COCH-ARM / FISHERS	P=0.296N	(e)	P=0.066	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	P=0.007**	(e)	(e)	(e)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014
Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Stomach, Glandular						
Inflammation Acute						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/1 (0%)	0/4 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/1.00	0/4.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/1 (0%)	0/4 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE						
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

	MALE								
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML			
Stomach, Glandular									
Pigmentation									
LESION RATES									
OVERALL(a)	0/10 (0%)	0/1 (0%)	1/4 (25%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
POLY-3 RATE (b)	0/10.00	0/1.00	1/4.00	0/0.00	0/0.00	0/10.00			
POLY-3 PERCENT (g)	0%	0%	25%	0%	0%	0%			
TERMINAL (d)	0/10 (0%)	0/1 (0%)	1/4 (25%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
FIRST INCIDENCE			94(T)						
STATISTICAL TESTS									
POLY 3	(e)	(e)	P=0.306	(e)	(e)	(e)			
POLY 1.5	(e)	(e)	P=0.306	(e)	(e)	(e)			
POLY 6	(e)	(e)	P=0.306	(e)	(e)	(e)			
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.286	(e)	(e)	(e)			
MAX-ISO-POLY-3	(e)	(e)	P=0.079	(e)	(e)	(e)			
HISTCONT SAME RTE									
HISTCONT ALL RTES									
CURR VS HC SAME RTE									
CURR VS HC ALL RTES									

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			MALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Thymus						
Hemorrhage						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE						94(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

	FEMALE								
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML			
Liver									
Inflammation Acute									
LESION RATES									
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00			
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%			
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)			
FIRST INCIDENCE									
STATISTICAL TESTS									
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)			
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)			
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)			
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)			
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)			
HISTCONT SAME RTE									
HISTCONT ALL RTES									
CURR VS HC SAME RTE									
CURR VS HC ALL RTES									

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

			FEMALE			
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Liver						
Necrosis						
LESION RATES						
OVERALL(a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	95(T)					
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.304N	(e)	(e)	(e)	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

	FEMALE						
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML	
Pancreas: Acinus							
Depletion Secretory							
LESION RATES							
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE						95(T)	
STATISTICAL TESTS							
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500	
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500	
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500	
COCH-ARM / FISHERS	P=0.304	(e)	(e)	(e)	(e)	P=0.500	
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159	
HISTCONT SAME RTE							
HISTCONT ALL RTES							
CURR VS HC SAME RTE							
CURR VS HC ALL RTES							

Species/Strain: Mouse/B6C3F1

Test Type: 90-DAY

Route: DOSED WATER

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014
Time Report Requested: 18:08:07

First Dose M/F: NA / NA

Lab: SRI

	FEMALE						
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML	
Salivary Glands: Submandibu	ul Gl						
Depletion Secretory							
LESION RATES							
OVERALL(a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE							
STATISTICAL TESTS							
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)	
HISTCONT SAME RTE							
HISTCONT ALL RTES							
CURR VS HC SAME RTE							
CURR VS HC ALL RTES							

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

FEMALE							
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML	
Skin							
Inflammation Acute							
LESION RATES							
OVERALL(a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/1.00	0/0.00	0/0.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE							
STATISTICAL TESTS							
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)	
HISTCONT SAME RTE							
HISTCONT ALL RTES							
CURR VS HC SAME RTE							
CURR VS HC ALL RTES							

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

	FEMALE						
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML	
Stomach, Glandular							
Cyst							
LESION RATES							
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE						95(T)	
STATISTICAL TESTS							
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500	
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500	
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500	
COCH-ARM / FISHERS	P=0.304	(e)	(e)	(e)	(e)	P=0.500	
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159	
HISTCONT SAME RTE							
HISTCONT ALL RTES							
CURR VS HC SAME RTE							
CURR VS HC ALL RTES							

Test Type: 90-DAY
Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

FEMALE						
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML
Stomach, Glandular						
Erosion						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE						
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Test Type: 90-DAY

Species/Strain: Mouse/B6C3F1

Route: DOSED WATER

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

	FEMALE							
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML		
Stomach, Glandular								
Inflammation Acute								
LESION RATES								
OVERALL(a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)		
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00		
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%		
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)		
FIRST INCIDENCE	95(T)							
STATISTICAL TESTS								
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500N		
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500N		
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500N		
COCH-ARM / FISHERS	P=0.304N	(e)	(e)	(e)	(e)	P=0.500N		
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159N		
HISTCONT SAME RTE								
HISTCONT ALL RTES								
CURR VS HC SAME RTE								
CURR VS HC ALL RTES								

Test Type: 90-DAY

Species/Strain: Mouse/B6C3F1

Route: DOSED WATER

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

	FEMALE							
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML		
Stomach, Glandular								
Pigmentation								
LESION RATES								
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)		
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00		
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%		
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)		
FIRST INCIDENCE								
STATISTICAL TESTS								
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)		
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)		
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)		
HISTCONT SAME RTE								
HISTCONT ALL RTES								
CURR VS HC SAME RTE								
CURR VS HC ALL RTES								

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Type: 90-DAY

Route: DOSED WATER

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

Species/Strain: Mouse/B6C3F1

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

	FEMALE						
DOSE	VEHICLE CONTROL	1 MG/ML	2 MG/ML	4 MG/ML	8 MG/ML	16 MG/ML	
Thymus							
Hemorrhage							
LESION RATES							
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE							
STATISTICAL TESTS							
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)	
HISTCONT SAME RTE							
HISTCONT ALL RTES							
CURR VS HC SAME RTE							
CURR VS HC ALL RTES							

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Type: 90-DAY Test Compound: Glyoxal **CAS Number:** 107-22-2 Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

Date Report Requested: 10/22/2014 Time Report Requested: 18:08:08

First Dose M/F: NA / NA

Lab: SRI

LEGEND

Experiment Number: 88038-02

(a)	Number of tumor-bearing animals/number of animals examined at site.
(b)	Number of tumor-bearing animals/Poly-3 number
(d)	Observed incidence at terminal kill.
(e)	Value of statistic cannot be computed.
(f)	Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group.
(g)	Poly-3 adjusted lifetime tumor incidence.

(n)

No statistics are calculated if all dose groups have fewer than two tumors.

(I) Interim sacrifice (T) Terminal sacrifice

Tumor rates based on numbers of animals necropsied.

To the right of any statistical result, indicates significance at (P<=0.05). To the right of any statistical result, indicates significance at (P<=0.01).

Indicates a negative trend for all tests Ν

The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

** END OF REPORT **