Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

**Test Compound:** 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

C Number: C95011

**Lock Date:** 11/10/1997

Cage Range: All

Date Range: All

Reasons For Removal:

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

Male RAT
FIRST TERMINAL SACRIFICE AT 94 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

	IND	IVIDUAL SURVIVAL TIMES (DAY	5)	
DOSE = 0 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 94 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 188 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 375 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014
Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

Male RAT
FIRST TERMINAL SACRIFICE AT 94 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

DOSE = 750 MG/KG

TOTAL 10

**UNCENSORED DEATHS 0** 

**CENSORED DEATHS 0** 

**TERMINAL 10** 

UNCENSORED DEATH DAYS

none

**CENSORED DEATH DAYS** 

none

DOSE = 1500 MG/KG

TOTAL 10

**UNCENSORED DEATHS 0** 

**CENSORED DEATHS 1** 

**TERMINAL 9** 

**UNCENSORED DEATH DAYS** 

none

**CENSORED DEATH DAYS** 

16

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014
Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

Male RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

## KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE		TIME (DAYS)									
		10	20	30	40	50	60	70	80	90	94(A)
0 MG/	/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
94 MG	G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
188	MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
375	MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
750	MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1500	MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY Route: GAVAGE

Species/Strain: Rat/F 344/N

# P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

#### Male RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

DOSE	0 MG/KG	94 MG/KG	188 MG/KG	375 MG/KG	
SURVIVAL AT END OF STUDY	100.0%	100.0%	100.0%	100.0%	
(KAPLAN-MEIER)					
SIGNIFICANCE (B)					
(LIFE TABLE)					
MEAN DAY OF NATURAL DEATHS (C)	•				
(STANDARD ERROR)	(.)	(.)	(.)	(.)	
MEAN LIFE SPAN (D)	94.0	94.0	94.0	94.0	
(STANDARD ERROR)	(0.0)	(0.0)	(0.0)	(0.0)	

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY Route: GAVAGE

Species/Strain: Rat/F 344/N

### P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

#### Male RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

DOSE	750 MG/KG	1500 MG/KG
SURVIVAL AT END OF STUDY	100.0%	100.0%
(KAPLAN-MEIER)		
SIGNIFICANCE (B)		
(LIFE TABLE)		
MEAN DAY OF NATURAL DEATHS (C)		
(STANDARD ERROR)	(.)	(.)
MEAN LIFE SPAN (D)	94.0	86.2
(STANDARD ERROR)	(0.0)	(7.8)

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014
Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

Female RAT
FIRST TERMINAL SACRIFICE AT 94 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

	IND	IVIDUAL SURVIVAL TIMES (DAT	<u> </u>	
DOSE = 0 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 94 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 188 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 375 MG/KG				
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

**Test Compound:** 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

**Female RAT** FIRST TERMINAL SACRIFICE AT 94 DAYS **INDIVIDUAL SURVIVAL TIMES (DAYS)** 

DOSE = 750 MG/KG

TOTAL 10

**UNCENSORED DEATHS 0** 

CENSORED DEATHS 0

**TERMINAL 10** 

**UNCENSORED DEATH DAYS** 

none

**CENSORED DEATH DAYS** 

DOSE = 1500 MG/KG

TOTAL 10

UNCENSORED DEATHS 3

**CENSORED DEATHS 0** 

**TERMINAL 7** 

**UNCENSORED DEATH DAYS** 

29 **CENSORED DEATH DAYS** 

none

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Species/Strain: Rat/F 344/N

Test Type: 90-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

Female RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

## KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE	TIME (DAYS)									
	10	20	30	40	50	60	70	80	90	94(A)
0 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
94 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
188 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
375 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
750 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1500 MG/KG	90.0	90.0	80 O	80.0	70.0					

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

# P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

# Female RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

DOSE	0 MG/KG	94 MG/KG	188 MG/KG	375 MG/KG	
SURVIVAL AT END OF STUDY	100.0%	100.0%	100.0%	100.0%	
(KAPLAN-MEIER)					
SIGNIFICANCE (B)	P=0.002				
(LIFE TABLE)					
MEAN DAY OF NATURAL DEATHS (C)	•				
(STANDARD ERROR)	(.)	(.)	(.)	(.)	
MEAN LIFE SPAN (D)	94.0	94.0	94.0	94.0	
(STANDARD ERROR)	(0.0)	(0.0)	(0.0)	(0.0)	

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

### P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

# Female RAT FIRST TERMINAL SACRIFICE AT 94 DAYS

DOSE	750 MG/KG	1500 MG/KG	
SURVIVAL AT END OF STUDY	100.0%	70.0%	
(KAPLAN-MEIER)			
SIGNIFICANCE (B)		P=0.210	
(LIFE TABLE)			
MEAN DAY OF NATURAL DEATHS (C)		41.7	
(STANDARD ERROR)	(.)	(26.2)	
MEAN LIFE SPAN (D)	94.0	78.3	
(STANDARD ERROR)	(0.0)	(10.5)	

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

**Test Type:** 90-DAY **Route:** GAVAGE

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

**Test Compound:** 5-(Hydroxymethyl)-2-furfural

**CAS Number:** 67-47-0

Date Report Requested: 10/18/2014 Time Report Requested: 18:33:20

First Dose M/F: NA / NA

Lab: BAT

\*\* END OF REPORT \*\*

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)