Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

NTP Study Number: C95003

Lock Date: 01/08/2003

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 3.0.2.3_002

PWG Approval Date: NONE

Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS

DOSE = VEHICLE CONTRO	OL			
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS	S			
CENSORED DEATH DAYS None				
DOSE = CONTROL SPECI	IAL			
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S			
CENSORED DEATH DAYS 24 24 24	24 24 24 24	24	24 24	
DOSE = 22.0 MG/KG	24 24 24 24		24 24	
TOTAL 10	UNCENSORED DEATHS (1	CENSORED DEATHS 0	TERMINAL 10
		,	CENSORED DEATHS 0	TERMINAL TO
UNCENSORED DEATH DAYS None	5			
CENSORED DEATH DAYS				
None				
DOSE = TK 22.0 MG/KG				
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S			
CENSORED DEATH DAYS				
24 24 24	24 24 24 24	24	24 24	

Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS

		, ,	
DOSE = 44.0 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS None			
DOSE = TK 44.0 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS 24 24 24	24 24 24 24	24 24 24	
DOSE = 87.5 MG/KG	21 21 21	21 21	
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS None			
DOSE = TK 87.5 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS			
24 24 24	24 24 24 24	24 24 24	

Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS

DOSE = 175 MG/KG						
TOTAL 10	UNCENSO	RED DEATHS	0	С	ENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS						
None						
CENSORED DEATH DAYS						
None						
DOSE = TK 175 MG/KG						
TOTAL 10	UNCENSO	RED DEATHS	0	С	ENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS						
None						
CENSORED DEATH DAYS						
24 24 24 2	4 24	24 24	24	24	24	
DOSE = 350 MG/KG						
TOTAL 10	UNCENSO	RED DEATHS	0	С	ENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS						
None						
CENSORED DEATH DAYS						
None						
DOSE = TK 350 MG/KG						
TOTAL 10	UNCENSO	RED DEATHS	0	С	ENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS						
None						
CENSORED DEATH DAYS						
24 24 24 2	4 24	24 24	24	24	24	

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS FIRST TERMINAL SACRIFICE AT 93 DAYS

		KAP	LAN-MEI	ER SUR	VIVAL P	ROBABI	LITY EST	TIMATES	5 (%)		
DOSE	DOSE TIME (DAYS)										
	10	20	30	40	50	60	70	80	90	93(A)	
VEHICLE CONTROL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
CONTROL SPECIAL	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22.0 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 22.0 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
44.0 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 44.0 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
87.5 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 87.5 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
175 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 175 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 350 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS FIRST TERMINAL SACRIFICE AT 93 DAYS

SURVIVAL SUMMARY STATISTICS

DOSE	VEHICLE CONTROL	CONTROL SPECIAL	22.0 MG/KG	TK 22.0 MG/KG
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	0.0%	100.0%	0.0%
SIGNIFICANCE (B) (LIFE TABLE)				
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	· (.)	(.)	· (.)	· (.)
MEAN LIFE SPAN (D) (STANDARD ERROR)	93.0 (0.0)	24.0 (0.0)	93.0 (0.0)	24.0 (0.0)

DOSE	44.0 MG/KG	TK 44.0 MG/KG	87.5 MG/KG	TK 87.5 MG/KG
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	0.0%	100.0%	0.0%
SIGNIFICANCE (B) (LIFE TABLE)				
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	· (.)	· (.)	· (.)	· (.)
MEAN LIFE SPAN (D) (STANDARD ERROR)	93.0 (0.0)	24.0 (0.0)	93.0 (0.0)	24.0 (0.0)

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone CAS Number: 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

MALE RATS FIRST TERMINAL SACRIFICE AT 93 DAYS

SURVIVAL SUMMARY STATISTICS DOSE 175 MG/KG **TK 175 MG/KG** 350 MG/KG TK 350 MG/KG SURVIVAL AT END OF STUDY 100.0% 0.0% 100.0% 0.0% (KAPLAN-MEIER) SIGNIFICANCE (B) --------(LIFE TABLE) **MEAN DAY OF** (.) **NATURAL DEATHS (C)** (.) (.) (.) (STANDARD ERROR) 93.0 93.0 24.0 **MEAN LIFE SPAN (D)** 24.0 (STANDARD ERROR) (0.0)(0.0)(0.0)(0.0)

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS

DOSE = VEHICLE CONTRO	OL			
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS	S			
CENSORED DEATH DAYS None				
DOSE = CONTROL SPECI	IAL			
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S			
CENSORED DEATH DAYS 24 24 24	24 24 24 24	24	24 24	
DOSE = 22.0 MG/KG	24 24 24 24		24 24	
TOTAL 10	UNCENSORED DEATHS (1	CENSORED DEATHS 0	TERMINAL 10
		,	CENSORED DEATHS 0	TERMINAL TO
UNCENSORED DEATH DAYS None	5			
CENSORED DEATH DAYS				
None				
DOSE = TK 22.0 MG/KG				
TOTAL 10	UNCENSORED DEATHS ()	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S			
CENSORED DEATH DAYS				
24 24 24	24 24 24 24	24	24 24	

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS

FIRST TERMINAL SACRIFICE AT 93 DAYS INDIVIDUAL SURVIVAL TIMES (DAYS)

DOSE = 44.0 MG/KG TOTAL 10 **UNCENSORED DEATHS 0 CENSORED DEATHS 0 TERMINAL 10 UNCENSORED DEATH DAYS** None CENSORED DEATH DAYS None DOSE = TK 44.0 MG/KG TOTAL 10 **UNCENSORED DEATHS 0 CENSORED DEATHS 10 TERMINAL 0 UNCENSORED DEATH DAYS** None CENSORED DEATH DAYS 24 24 24 24 24 24 24 24 24 24 DOSE = 87.5 MG/KGTOTAL 10 **UNCENSORED DEATHS 0 CENSORED DEATHS 0 TERMINAL 10 UNCENSORED DEATH DAYS** None **CENSORED DEATH DAYS** None DOSE = TK 87.5 MG/KG TOTAL 10 **UNCENSORED DEATHS 0 CENSORED DEATHS 10 TERMINAL 0** UNCENSORED DEATH DAYS None **CENSORED DEATH DAYS** 4 24 24 24 24 24 24 24 24 24

Test Type: 90-DAY

Route: SKIN APPLICATION
Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS

		·	
DOSE = 175 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS None			
DOSE = TK 175 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS 24 24 24	24 24 24 24	24 24 24	
DOSE = 350 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
UNCENSORED DEATH DAYS	S		
CENSORED DEATH DAYS None			
DOSE = TK 350 MG/KG			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 10	TERMINAL 0
UNCENSORED DEATH DAYS None	S		
CENSORED DEATH DAYS			
24 24 24	24 24 24 24	24 24 24	

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS FIRST TERMINAL SACRIFICE AT 93 DAYS

		KAP	LAN-MEI	ER SUR	VIVAL P	ROBABI	LITY EST	TIMATES	5 (%)		
DOSE	DOSE TIME (DAYS)										
	10	20	30	40	50	60	70	80	90	93(A)	
VEHICLE CONTROL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
CONTROL SPECIAL	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22.0 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 22.0 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
44.0 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 44.0 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
87.5 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 87.5 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
175 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 175 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350 MG/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TK 350 MG/KG	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS

FIRST TERMINAL SACRIFICE AT 93 DAYS

SURVIVAL SUMMARY STATISTICS

DOSE	VEHICLE CONTROL	CONTROL SPECIAL	22.0 MG/KG	TK 22.0 MG/KG
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	0.0%	100.0%	0.0%
SIGNIFICANCE (B) (LIFE TABLE)				
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	· (.)	(.)	· (.)	· (.)
MEAN LIFE SPAN (D) (STANDARD ERROR)	93.0 (0.0)	24.0 (0.0)	93.0 (0.0)	24.0 (0.0)

DOSE	44.0 MG/KG	TK 44.0 MG/KG	87.5 MG/KG	TK 87.5 MG/KG
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	0.0%	100.0%	0.0%
SIGNIFICANCE (B) (LIFE TABLE)				
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	· (.)	· (.)	· (.)	· (.)
MEAN LIFE SPAN (D) (STANDARD ERROR)	93.0 (0.0)	24.0 (0.0)	93.0 (0.0)	22.0 (2.0)

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 90-DAY

Route: SKIN APPLICATION Species/Strain: RATS/F 344/N P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Methyl trans-styryl ketone **CAS Number:** 1896-62-4

Date Report Requested: 08/31/2016 Time Report Requested: 09:09:36 First Dose M/F: 12/10/01 / 12/11/01

Lab: MBA

FEMALE RATS

FIRST TERMINAL SACRIFICE AT 93 DAYS

SURVIVAL SUMMARY STATISTICS								
DOSE	175 MG/KG	TK 175 MG/KG	350 MG/KG	TK 350 MG/KG				
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	0.0%	100.0%	0.0%				
SIGNIFICANCE (B) (LIFE TABLE)								
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	<i>.</i> (.)	(.)	(.)	· (.)				
MEAN LIFE SPAN (D) (STANDARD ERROR)	93.0 (0.0)	24.0 (0.0)	93.0 (0.0)	24.0 (0.0)				

*** END OF REPORT ***

⁽A) FIRST TERMINAL SACRIFICE
(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".
(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE
(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)