

Experiment Number: 20209 - 03
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS
Pentabromodiphenyl oxide (technical) (DE 71)
CAS Number: 32534-81-9

Date Report Requested: 09/19/2014
Time Report Requested: 15:44:42
First Dose M/F: 08/26/08 / 08/26/08
Lab: SRI

Custom Report - Liver Special Pool

NTP Study Number:	C20209		
Lock Date:	08/31/2011		
Cage Range:	ALL		
Date Range:	ALL		
Reasons For Removal:	25021 TSAC	25020 NATD	25019 MSAC
	25018 DACC	25026 Other	
Removal Date Range:	ALL		
Treatment Groups:	Include ALL		
Study Gender:	Both		
TDMSE Version:	2.5.0.0_sfh		
PWG Approval Date:	08/06/2014		

Experiment Number: 20209 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Pentabromodiphenyl oxide (technical) (DE 71)

CAS Number: 32534-81-9

Date Report Requested: 09/19/2014

Time Report Requested: 15:44:42

First Dose M/F: 08/26/08 / 08/26/08

Lab: SRI

HISTORICAL CONTROL STUDIES

From June 2013 report

SAME ROUTE

20320-03 -- Tetrabromobisphenol A (GAVAGE CORN OIL)

ALL ROUTES

20203-03 -- Green tea extract (GAVAGE WATER)

20515-03 -- Metal working fluids (CIMSTAR 3800) (INHALATION AIR)

20320-03 -- Tetrabromobisphenol A (GAVAGE CORN OIL)

Experiment Number: 20209 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Pentabromodiphenyl oxide (technical) (DE 71)

CAS Number: 32534-81-9

Date Report Requested: 09/19/2014

Time Report Requested: 15:44:42

First Dose M/F: 08/26/08 / 08/26/08

Lab: SRI

**FOR ALL DOSES THE TUMOR RATES IN THE FOLLOWING TISSUES/ORGANS ARE BASED ON NUMBER OF TISSUES EXAMINED.
IN OTHER TISSUES/ORGANS RATES ARE BASED ON THE NUMBER OF ANIMALS NECROPSIED.**

Liver

Experiment Number: 20209 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Pentabromodiphenyl oxide (technical) (DE 71)

CAS Number: 32534-81-9

Date Report Requested: 09/19/2014

Time Report Requested: 15:44:42

First Dose M/F: 08/26/08 / 08/26/08

Lab: SRI

SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF PENTABROMODIPHENYL OXIDE (TECHNICAL) (DE 71)

MALE RATS

Organ

Liver

Morphology

Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatocholangioma

FEMALE RATS

Organ

Liver

Morphology

Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatocholangioma

Experiment Number: 20209 - 03
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS
 Pentabromodiphenyl oxide (technical) (DE 71)
 CAS Number: 32534-81-9

Date Report Requested: 09/19/2014
 Time Report Requested: 15:44:42
 First Dose M/F: 08/26/08 / 08/26/08
 Lab: SRI

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(Wistar Han)
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	0 MG/KG	3 MG/KG	15 MG/KG	50 MG/KG
Liver				
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatocholangioma				
TUMOR RATES				
OVERALL (a)	3/49 (6%)	2/50 (4%)	4/50 (8%)	11/50 (22%)
POLY-3 RATE (b)	3/42.38	2/42.11	4/43.29	11/40.49
POLY-3 PERCENT (g)	7.1%	4.8%	9.2%	27.2%
TERMINAL (d)	3/36 (8%)	1/35 (3%)	4/38 (11%)	5/25 (20%)
FIRST INCIDENCE	729 (T)	658	729 (T)	595
HC TUMORS SAME ROUTE	0/50 (0%)			
HC TUMORS ALL ROUTES	0/150 (0%)			
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.503N	P=0.512	P=0.014*
POLY 1.5	P<0.001**	P=0.498N	P=0.517	P=0.017*
POLY 6	P<0.001**	P=0.504N	P=0.509	P=0.011*
COCH-ARM / FISHERS	P<0.001**	P=0.490N	P=0.511	P=0.022*
MAX-ISO-POLY-3	P<0.001**	P=0.327N	P=0.358	P=0.007**
HISTCONT SAME RTE	P=0.077	P=0.313	P=0.229	P=0.167
HISTCONT ALL RTES	P=0.010**	P=0.078	P=0.034*	P=0.015*
CURR VS HC SAME RTE	P=0.078			
CURR VS HC ALL RTES	P=0.002**			

Experiment Number: 20209 - 03
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS
 Pentabromodiphenyl oxide (technical) (DE 71)
 CAS Number: 32534-81-9

Date Report Requested: 09/19/2014
 Time Report Requested: 15:44:42
 First Dose M/F: 08/26/08 / 08/26/08
 Lab: SRI

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(Wistar Han)
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	0 MG/KG	3 MG/KG	15 MG/KG	50 MG/KG
Liver				
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatocholangioma				
TUMOR RATES				
OVERALL (a)	3/50 (6%)	2/49 (4%)	8/50 (16%)	21/47 (45%)
POLY-3 RATE (b)	3/43.21	2/45.55	8/44.09	21/39.05
POLY-3 PERCENT (g)	6.9%	4.4%	18.2%	53.8%
TERMINAL (d)	3/37 (8%)	2/39 (5%)	6/33 (18%)	15/28 (54%)
FIRST INCIDENCE	729 (T)	729 (T)	656	490
HC TUMORS SAME ROUTE	1/50 (2%)			
HC TUMORS ALL ROUTES	2/150 (1%)			
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.476N	P=0.103	P<0.001**
POLY 1.5	P<0.001**	P=0.485N	P=0.105	P<0.001**
POLY 6	P<0.001**	P=0.468N	P=0.100	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.510N	P=0.100	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.308N	P=0.058	P<0.001**
HISTCONT SAME RTE	P=0.050*	P=1.000	P=0.192	P=0.129
HISTCONT ALL RTES	P=0.004**	P=0.210	P=0.023*	P=0.006**
CURR VS HC SAME RTE	P=0.346			
CURR VS HC ALL RTES	P=0.051			

Experiment Number: 20209 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Wistar Han

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Pentabromodiphenyl oxide (technical) (DE 71)

CAS Number: 32534-81-9

Date Report Requested: 09/19/2014

Time Report Requested: 15:44:42

First Dose M/F: 08/26/08 / 08/26/08

Lab: SRI

LEGEND

- (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.
- (h) Historical Controls statistic is not calculated when the HC Poly-3 rate is higher than the Poly-3 rates for all dose groups.
- (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 ($P \leq 0.05$).
- ** To the right of any statistical result, indicates significance at ($P \leq 0.01$).
- N Indicates a negative trend for all tests
The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

*** END OF REPORT ***