

**Experiment Number:** 20213 - 02  
**Test Type:** 39-WEEK  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/HSD

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**

Abrasive blasting agents (blasting sand)

**CAS Number:** BLASTINGSAND

**Date Report Requested:** 03/20/2012

**Time Report Requested:** 13:29:21

**First Dose M/F:** 04/20/09 / NA

**Lab:** BNW

F1\_26 Wk. SSAC

**NTP Study Number:** C20213  
**Lock Date:** 08/17/2010  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** 25017 SSAC  
**Removal Date Range:** 16-Oct-2009 - 16-Oct-2009  
**Treatment Groups:** Include ALL  
**Study Gender:** Male  
**TDMSE Version:** 2.6.0.0\_007  
**PWG Approval Date:** NONE

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**SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF ABRASIVE BLASTING AGENTS (BLASTING SAND)**

**MALE RATS**

**Organ**

Lung

Lung: Alveolar Epithelium

Lung: Interstitium

Lymph Node, Bronchial

Lymph Node, Mediastinal

Nose: Respiratory Epithelium

**Morphology**

Foreign Body

Infiltration Cellular Histiocyte

Inflammation Chronic

Hyperplasia

Fibrosis

Foreign Body

Infiltration Cellular Histiocyte

Fibrosis

Foreign Body

Infiltration Cellular Histiocyte

Accumulation, Hyaline Droplet

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 26 WEEKS**

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DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Adrenal Cortex</b>				
<b>Hyperplasia Lymphoid</b>				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
POLY-3 RATE (b)	0/0.00	0/0.00	0/0.00	1/1.00
POLY-3 PERCENT (g)	0%	0%	0%	100%
INT SACRIFICE 1	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	180 (l)
<hr/>				
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung</b>				
<b>Foreign Body</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	0%	100%	100%	100%
INT SACRIFICE 1	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (l)	180 (l)	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung</b>				
<b>Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/8 (50%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	4/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	50%	100%	100%	100%
INT SACRIFICE 1	4/8 (50%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	180 (I)	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.004**	P=0.024*	P=0.024*	P=0.024*
POLY 1.5	P=0.004**	P=0.024*	P=0.024*	P=0.024*
POLY 6	P=0.004**	P=0.024*	P=0.024*	P=0.024*
COCH-ARM / FISHERS	P=0.015*	P=0.038*	P=0.038*	P=0.038*
MAX-ISO-POLY-3	P<0.001**	P=0.004**	P=0.004**	P=0.004**

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/8 (25%)	7/8 (88%)	7/8 (88%)	8/8 (100%)
POLY-3 RATE (b)	2/8.00	7/8.00	7/8.00	8/8.00
POLY-3 PERCENT (g)	25%	87.5%	87.5%	100%
INT SACRIFICE 1	2/8 (25%)	7/8 (88%)	7/8 (88%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	180 (I)	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.008**	P=0.008**	P<0.001**
POLY 1.5	P<0.001**	P=0.008**	P=0.008**	P<0.001**
POLY 6	P<0.001**	P=0.008**	P=0.008**	P<0.001**
COCH-ARM / FISHERS	P=0.003**	P=0.020*	P=0.020*	P=0.003**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung Proteinosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	0/8 (0%)	0/8 (0%)	1/8 (13%)
POLY-3 RATE (b)	0/8.00	0/8.00	0/8.00	1/8.00
POLY-3 PERCENT (g)	0%	0%	0%	12.5%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	0/8 (0%)	1/8 (13%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.197	(e)	(e)	P=0.500
POLY 1.5	P=0.197	(e)	(e)	P=0.500
POLY 6	P=0.197	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.193	(e)	(e)	P=0.500
MAX-ISO-POLY-3	P=0.078	(e)	(e)	P=0.158

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 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung: Alveolar Epithelium Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	0%	100%	100%	100%
INT SACRIFICE 1	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (l)	180 (l)	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)



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 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lung: Interstitium Fibrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	8/8 (100%)	7/8 (88%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	8/8.00	7/8.00	8/8.00
POLY-3 PERCENT (g)	0%	100%	87.5%	100%
INT SACRIFICE 1	0/8 (0%)	8/8 (100%)	7/8 (88%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (l)	180 (l)	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P<0.001**	(e)

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 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Bronchial Fibrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/7 (0%)	0/8 (0%)	1/8 (13%)	1/8 (13%)
POLY-3 RATE (b)	0/7.00	0/8.00	1/8.00	1/8.00
POLY-3 PERCENT (g)	0%	0%	12.5%	12.5%
INT SACRIFICE 1	0/7 (0%)	0/8 (0%)	1/8 (13%)	1/8 (13%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.246	(e)	P=0.527	P=0.527
POLY 1.5	P=0.246	(e)	P=0.527	P=0.527
POLY 6	P=0.246	(e)	P=0.527	P=0.527
COCH-ARM / FISHERS	P=0.238	(e)	P=0.533	P=0.533
MAX-ISO-POLY-3	P=0.179	(e)	P=0.183	P=0.183

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 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Bronchial Foreign Body</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/7 (0%)	6/8 (75%)	5/8 (63%)	8/8 (100%)
POLY-3 RATE (b)	0/7.00	6/8.00	5/8.00	8/8.00
POLY-3 PERCENT (g)	0%	75%	62.5%	100%
INT SACRIFICE 1	0/7 (0%)	6/8 (75%)	5/8 (63%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (I)	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P=0.006**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P=0.006**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P=0.006**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.006**	P=0.019*	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Bronchial Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/7 (0%)	6/8 (75%)	5/8 (63%)	8/8 (100%)
POLY-3 RATE (b)	0/7.00	6/8.00	5/8.00	8/8.00
POLY-3 PERCENT (g)	0%	75%	62.5%	100%
INT SACRIFICE 1	0/7 (0%)	6/8 (75%)	5/8 (63%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (I)	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P=0.006**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P=0.006**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P=0.006**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.006**	P=0.019*	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

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 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Bronchial Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/7 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
POLY-3 RATE (b)	0/7.00	0/8.00	1/8.00	0/8.00
POLY-3 PERCENT (g)	0%	0%	12.5%	0%
INT SACRIFICE 1	0/7 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	180 (l)	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.694	(e)	P=0.527	(e)
POLY 1.5	P=0.694	(e)	P=0.527	(e)
POLY 6	P=0.694	(e)	P=0.527	(e)
COCH-ARM / FISHERS	P=0.698	(e)	P=0.533	(e)
MAX-ISO-POLY-3	P=0.257	(e)	P=0.183	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Mediastinal Fibrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	0/8 (0%)	0/7 (0%)	2/7 (29%)
POLY-3 RATE (b)	0/8.00	0/8.00	0/7.00	2/7.00
POLY-3 PERCENT (g)	0%	0%	0%	28.6%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	0/7 (0%)	2/7 (29%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.026*	(e)	(e)	P=0.188
POLY 1.5	P=0.026*	(e)	(e)	P=0.188
POLY 6	P=0.026*	(e)	(e)	P=0.188
COCH-ARM / FISHERS	P=0.034*	(e)	(e)	P=0.200
MAX-ISO-POLY-3	P=0.011*	(e)	(e)	P=0.053

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Mediastinal Foreign Body</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	6/8 (75%)	7/7 (100%)	7/7 (100%)
POLY-3 RATE (b)	0/8.00	6/8.00	7/7.00	7/7.00
POLY-3 PERCENT (g)	0%	75%	100%	100%
INT SACRIFICE 1	0/8 (0%)	6/8 (75%)	7/7 (100%)	7/7 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (l)	180 (l)	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.003**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Mediastinal Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	6/8 (75%)	7/7 (100%)	7/7 (100%)
POLY-3 RATE (b)	0/8.00	6/8.00	7/7.00	7/7.00
POLY-3 PERCENT (g)	0%	75%	100%	100%
INT SACRIFICE 1	0/8 (0%)	6/8 (75%)	7/7 (100%)	7/7 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	180 (l)	180 (l)	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.003**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**



Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Lymph Node, Mediastinal Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/8 (25%)	0/8 (0%)	1/7 (14%)	1/7 (14%)
POLY-3 RATE (b)	2/8.00	0/8.00	1/7.00	1/7.00
POLY-3 PERCENT (g)	25%	0%	14.3%	14.3%
INT SACRIFICE 1	2/8 (25%)	0/8 (0%)	1/7 (14%)	1/7 (14%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	---	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.547N	P=0.223N	P=0.548N	P=0.548N
POLY 1.5	P=0.547N	P=0.223N	P=0.548N	P=0.548N
POLY 6	P=0.547N	P=0.223N	P=0.548N	P=0.548N
COCH-ARM / FISHERS	P=0.549N	P=0.233N	P=0.554N	P=0.554N
MAX-ISO-POLY-3	P=0.198N	P=0.063N	P=0.317N	P=0.317N

Experiment Number: 20213 - 02  
Test Type: 39-WEEK  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Abrasive blasting agents (blasting sand)  
CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
Time Report Requested: 13:29:21  
First Dose M/F: 04/20/09 / NA  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 26 WEEKS**

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DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<hr/>				
Nose: Olfactory Epithelium Accumulation, Hyaline Droplet				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	8/8 (100%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	8/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	100%	100%	100%	100%
INT SACRIFICE 1	8/8 (100%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	180 (I)	180 (I)	180 (I)
<hr/>				
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

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Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Nose: Respiratory Epithelium Accumulation, Hyaline Droplet</b>				
<b>LESION RATES</b>				
OVERALL (a)	6/8 (75%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	6/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	75%	100%	100%	100%
INT SACRIFICE 1	6/8 (75%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	180 (I)	180 (I)	180 (I)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.096	P=0.223	P=0.223	P=0.223
POLY 1.5	P=0.096	P=0.223	P=0.223	P=0.223
POLY 6	P=0.096	P=0.223	P=0.223	P=0.223
COCH-ARM / FISHERS	P=0.106	P=0.233	P=0.233	P=0.233
MAX-ISO-POLY-3	P=0.015*	P=0.063	P=0.063	P=0.063

Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Nose: Respiratory Epithelium Inflammation</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/8 (13%)	0/8 (0%)	0/8 (0%)	0/8 (0%)
POLY-3 RATE (b)	1/8.00	0/8.00	0/8.00	0/8.00
POLY-3 PERCENT (g)	12.5%	0%	0%	0%
INT SACRIFICE 1	1/8 (13%)	0/8 (0%)	0/8 (0%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	180 (I)	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.301N	P=0.500N	P=0.500N	P=0.500N
POLY 1.5	P=0.301N	P=0.500N	P=0.500N	P=0.500N
POLY 6	P=0.301N	P=0.500N	P=0.500N	P=0.500N
COCH-ARM / FISHERS	P=0.298N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.078N	P=0.158N	P=0.158N	P=0.158N

Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Skin</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
POLY-3 RATE (b)	0/0.00	0/0.00	0/0.00	1/1.00
POLY-3 PERCENT (g)	0%	0%	0%	100%
INT SACRIFICE 1	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

Experiment Number: 20213 - 02  
 Test Type: 39-WEEK  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Abrasive blasting agents (blasting sand)  
 CAS Number: BLASTINGSAND

Date Report Requested: 03/20/2012  
 Time Report Requested: 13:29:21  
 First Dose M/F: 04/20/09 / NA  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 LAST REMOVAL AT 26 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
<b>Trachea: Glands Inflammation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/8 (0%)	0/8 (0%)	0/8 (0%)	1/8 (13%)
POLY-3 RATE (b)	0/8.00	0/8.00	0/8.00	1/8.00
POLY-3 PERCENT (g)	0%	0%	0%	12.5%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	0/8 (0%)	1/8 (13%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	180 (l)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.197	(e)	(e)	P=0.500
POLY 1.5	P=0.197	(e)	(e)	P=0.500
POLY 6	P=0.197	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.193	(e)	(e)	P=0.500
MAX-ISO-POLY-3	P=0.078	(e)	(e)	P=0.158

**Experiment Number:** 20213 - 02

**Test Type:** 39-WEEK

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** RATS/HSD

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**

Abrasive blasting agents (blasting sand)

**CAS Number:** BLASTINGSAND

**Date Report Requested:** 03/20/2012

**Time Report Requested:** 13:29:21

**First Dose M/F:** 04/20/09 / NA

**Lab:** BNW

**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.
  - (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 \*\*\*