

DATA REVIEW FOR ACUTE INHALATION TOXICITY TESTING (§81-3)

Product Manager:18
MRID No.: 418266-04
Testing Laboratory:Cosmopolitan Safety
Author(s):Geoffrey Robbins
Species:Rat, Sprague Dawley

Reviewer: L. Markarian
Report Date:4/24/88
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Weight:M 240 - 340 g, F 200 - 300 g
Source:Unspecified

Test Material:Bmp Technical Powder 110,00 IU/mg, Lot 28, Powder
Quality Assurance (40 CFR §160.12):Included

Summary:

1. The estimated LC_{50} is
2. Mean Concentration:
3. Tox. Category: Classification:supplementary

Procedure (Deviation From §81-3):

Two groups of ten animals were used for the test. A group exposed to the test atmosphere and a control group exposed to air only.

Exposure was in a semicylindrical, 47.4 L chamber. The test material was introduced from a portal at the top and exhausted from the bottom with a vacuum pump.

The test atmosphere was generated using a Wright dust generator and Gast Air pump supplied the air(3.0 psi). A discharge tube delivered the aerosol from the dust generator to the chamber. Exhaust was maintained at 10 lpm as measured by a flowmeter. In addition to the 240 minute exposure time was allowed for equilibration (15 Minutes).

Chamber concentrations were measured gravimetrically using an "aerosol analysis monitor" that consisted of two superimposed filters with activated charcoal between them. Sampling was from the breathing zone at ± 1 lpm for no more than 10 minutes.

Particle size determination was made four times during the exposure, using a cascade impactor (Casella).

The chamber temperature and humidity were monitored and recorded at 30 minute intervals. Mean air flow was constant at 10 lpm

Observations were hourly during the exposure. Animals were observed after being taken out of the chamber, at 1, 3, and 5 hour and daily thereafter. There were twice daily mortality checks on week days. Body weights were recorded at initiation and on days 2, 3, 4, 7, and 14.

Necropsy was performed on all animals.

Results:

Chamber Concentrations	Test				Control
Gravimetric mg/kg	1.5				0
Range	1.44 - 1.70				
MMAD um	I	II	III	IV	
	4.3	6.5	5.0	4.5	
Average um	5.07				
GSD um	2.3	3.1	1.9	1.9	
% < 2 um	17.1	14.0	11.0	18.7	
Chamber temperature ° F	68 - 76				68 - 76
Humidity %	47 - 67				66 - 82
Air flow lpm	10				10
Mortality					
Males	0/5				0/5
Females	0/5				0/5
Combined	0/10				0/10
Signs of Toxicity					
During exposure	Dorsum covered with test material				None
Post exposure	Brown stain				None
Day 3 - 14	Normal				Normal
Necropsy Findings	None				None

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