Study Title

Inhalation Toxicity Screen wit[redacted]

Laboratory Project ID

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Author

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Study Completed

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Performing Laboratory

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[redacted]

Inhalation Toxicity Screen with [redacted]

[redacted] H-22485

An inhalation toxicity screen was conducted with six male rats exposed for four hours to H-22485 according to Standard Operating Procedure No. AI005-T. The test substance was aerosolized with a Spraying Systems Nebulizer. The aerosol atmosphere was analyzed by gravimetric analysis of filter samples. After filter samples were collected, the filters were immediately weighed to determine the wet aerosol concentration. After overnight drying in a desiccator, the filter samples were weighed to determine the dry aerosol weight. The mean aerosol concentrations during the four-hour exposure were 330 mg/m^3 (wet) and 300 mg/m^3 (dry). The aerosol mass median aerodynamic diameter was 2.5 µm. At the end of the exposure rats showed a diminished alerting response. No deaths occurred during the exposure, however all rats died within three days of exposure. Upon unloading rats from the chamber, clinical signs observed in the rats exposed to H-22485 were red discharge from the eyes and red discharge from the nose. Two of six rats died on the day of exposure, three rats died on the following day, and the remaining rat died two days after exposure. The rat that survived two days showed severe weight loss over that period. Clinical signs observed during the recovery period included lethargy, hunched posture, and irregular respiration. Experimental details of the study are in laboratory notebook [redacted]

Characterization of Chamber Atmosphere

Chamber Aerosol			Particle Size Analysis					Mortality
Mean Conc. (mg/m^3)	SD	Range	MMAD[a]	GSD[b]	%<1µm	%<3µm	%<10µm	Deaths/Exposed
300 (dry)	91	180 - 490	2.5	2.3	14	60	95	6/6

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a MMAD = Mass Median Aerodynamic Diameter(µm)
b GSD = Geometric Standard Deviation