Study Title

Inhalation Toxicity Screen with [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-22484

An inhalation toxicity screen was conducted with six male rats exposed for four hours to H-22484 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 410 mg/m^3 (wet) and 400 mg/m^3 (dry). The aerosol mass median aerodynamic diameter was 4 µm. During the exposure rats showed a diminished alerting response. No deaths occurred during the exposure, however all rats died within four days of exposure. Upon unloading rats from the chamber, clinical signs of toxicity observed in the rats exposed to H-22484 were irregular respiration and lethargy. Three of six rats died approximately two hours after exposure, one rat died on the day after exposure, one rat died two days after exposure and the remaining rat died three days after exposure. After the exposure rats continued to lose weight until they died. 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
400 (dry)	29	360 - 440	4	2.2	4	35	88	6/6

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