

Acute Inhalation Toxicity

Cupric sulfate

Methods

To confirm acute inhalation toxicity, 3 male and 3 female rats per concentration were exposed to cupric sulfate at concentrations 0.5, 1 and 5 mg/L for 4 hours in nose-only chamber. It was measured the concentration of cupric sulfate, particle size distribution and the chamber environment during the exposure time. Clinical signs and body weight changes were recorded for 14 days after the end of the exposure, and gross findings were observed after necropsy.

Results

The mean concentration of cupric sulfate for was 0.539 ± 0.044 , 1.040 ± 0.116 and 4.978 ± 0.184 mg/L during the exposure time. The aerosol mass median aerodynamic diameter (MMAD) was 7.048, 8.714 and 3.408 μm , and the geometric standard deviation (GSD) was 1.7, 2.7 and 2.6. Death and moribund were observed in all animals exposed to 5 mg/L and 3 male rats exposed to 1 mg/L. There was no death at the 0.5 mg/L.

Cupric sulfate

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mg/L

MMAD

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& 3.408
 μm

GSD

1.7, 2.7
& 2.6

Conclusion

GHS Classification - Acute toxicity (inhalation - dusts and mists) :
Category 4 (> 1 ~ ≤ 5 mg/L)

Laboratory



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