FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

Section 1 — Chemical Product and Company Identification

Manganese(II) Sulfate

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Manganese(II) sulfate, monohydrate

Synonym: manganese sulfate, manganous sulfate

CAS#: 10034-96-5

Section 3 — Hazards Identification

Section 4 — First Aid Measures

Pink crystalline powder or chunks. Odorless. Slightly toxic by inhalation. Body tissue irritant. Avoid all body tissue contact.

0 is low hazard, 3 is high hazard

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Non combustible solid.

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Deliquescent, store in Flinn Chem-Saf Bag.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TWA 5 mg/m3 (Mn) (ACGIH)

492.00

Revision Date: September 20, 2004

> FLINN AT-A-GLANCE Health-1 Flammability-0 Reactivity-1 Exposure-1 Storage-1

NFPA CODE

None Established

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Section 9 — Physical and Chemical Properties

Pink crystalline powder or chunks. Solubility: Soluble in water; insoluble in alcohol. Formula: MnSO4 H2O Formula Weight: 169.01

Section 10 — Stability and Reactivity

Avoid contact with strong acids. Shelf life: Poor; substance hygroscopic.

Section 11 — Toxicological Information

Acute effects: Irritant Chronic effects: Possible mutagen Target organs: Central nervous system, lungs ORL-RAT LD50: N.A. IHL-RAT LC50: N.A. SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations. Flinn Suggested Disposal Method #27f is one option.

Section 14 — Transport Information

Shipping Name: Not regulated Hazard Class: N/A UN Number: N/A

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (232-089-9).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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Flinn Chemicals--Your Best Choice

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Specific Gravity: 2.1 Melting Point: 30 C