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FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 488.00

Revision Date: November 25, 2002



Section 1 — Chemical Product and Company Identification

Manganese

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

CAS#: 7439-96-5

Section 3 — Hazards Identification

Brittle, silvery metal. Odorless.

Irritant as dust, powder or fume. Avoid inhalation of dust.

Combustible solid. Dust is flammable.

FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-1

Exposure-1

Storage-0

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

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: Give large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Combustible solid.

Dust or powder is flammable.

Fire Fighting Instructions: Use Class D, Met-L-X, or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water. Firefighters should wear PPE and SCBA with full facepiece operating in positive mode.

NFPA CODE

None Established

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 #1. Store with metals and metal hydrides.

Moisture sensitive material. Use and dispense in a hood.

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 1 mg/m³, STEL 3 mg/m³ (NIOSH, NIOSH)

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Section 9 — Physical and Chemical Properties

Brittle, silvery metal. Odorless.
Solubility: Decomposes water. Readily dissolves in dilute mineral acids.
Formula: Mn
Formula Weight: 54.94

Boiling Point: 2097 C
Specific Gravity: 7.44
Melting Point: 1245 C

Section 10 — Stability and Reactivity

Avoid contact with acids, bases, moisture, halogens, phosphorus.
Shelf life: Indefinite.

Section 11 — Toxicological Information

Acute effects: Harmful dust
Chronic effects: Reproductive, neurological hazard
Target organs: Nerves, lungs

ORL-RAT LD50: 9 gm/kg
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 #26a 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 (231-105-1).

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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