

Manganese Dioxide Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manganese Dioxide

Signal Word
WARNING

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9980

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

Hazard class: Acute toxicity, oral (Category 4). Harmful if inhaled (H332). Avoid breathing dust (P261).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|-------------------|------------|------------------|----------------|---------------|
| Manganese dioxide | 1313-13-9 | MnO ₂ | 86.94 | |

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Call a POISON CENTER or physician if you feel unwell (P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

Strong oxidizer, fire hazard when in contact with combustible materials.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code

H: 2

F: 0

R: 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a 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 #4. Store with hydroxides, oxides, silicates and carbonates. Store in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

Exposure guidelines: Ceiling 5 mg/m³ (OSHA); 0.1 mg/m³ (inhalable fraction) (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Black or silver crystals or powder. Odorless. Melting point: 535 °C (decomposes)

Soluble: Hydrochloric acid. Insoluble in water. Specific gravity: 5.026

SECTION 10 — STABILITY AND REACTIVITY

May ignite organic materials, and is a strong oxidant that reacts violently with combustible and reducing agents. Avoid contact with other oxidizing agents.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritating dust. ORL-RAT LD₅₀: 3478 mg/kg

Chronic effects: N.A. IHL-RAT LC₅₀: N.A.

Target organs: Nerves, lungs. SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (215-202-6), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.