

## 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 <sub>2</sub>	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.

NFPA Code

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

H: 2

When heated to decomposition, may emit toxic fumes.

F: 0

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

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.

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## **SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates. Store in a cool, dry place.

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## **SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling. Exposure guidelines: Ceiling 5 mg/m<sup>3</sup> (OSHA); 0.1 mg/m<sup>3</sup> (inhalable fraction) (ACGIH)

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## **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Black or silver crystals or powder. Odorless.	Melting point: 535 °C (decomposes)
Soluble: Hydrochloric acid. Insoluble in water.	Specific gravity: 5.026

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## **SECTION 10 — STABILITY AND REACTIVITY**

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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.

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## **SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritating dust.	ORL-RAT LD <sub>50</sub> : 3478 mg/kg
Chronic effects: N.A.	IHL-RAT LC <sub>50</sub> : N.A.
Target organs: Nerves, lungs.	SKN-RBT LD <sub>50</sub> : N.A.

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## **SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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## **SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #26a is one option.

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## **SECTION 14 — TRANSPORT INFORMATION**

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

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## **SECTION 15 — REGULATORY INFORMATION**

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

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## **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.**