# FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

**SDS #:** 488.00

**Revision Date:** December 13, 2013

#### 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

Signal Word

DANGER

Pictograms

#### **SECTION 2 — HAZARDS IDENTIFICATION**

Although manganese in the form of chips is nonhazardous, residual powder or dust may be found in the container which possesses the associated hazards below.

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust (P261).

Hazard class: Flammable solids (Category 1). Flammable solid (H228). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Manganese	7439-96-5	Mn	54.94	

#### **SECTION 4 — FIRST AID MEASURES**

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

**If inhaled:** Remove victim to fresh air 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: Rinse with water for several minutes.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

## **SECTION 5 — FIRE FIGHTING MEASURES**

Dust or powder is flammable.

NFPA CODE

**In case of fire:** Use Class D, Met-L-X, or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water.

None established

## <u>SECTION 6 — ACCIDENTAL RELEASE MEASURES</u>

Do not use water until all material is cleaned up. 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.

Safety Data Sheet Manganese

**SDS #:** 488.00

**Revision Date:** December 13, 2013

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

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Moisture sensitive material. Keep container tightly closed (P233). Use only in a hood or in a well-ventilated area (P271).

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash thoroughly after handling. Use only in a hood or in a well-ventilated area (P271).

Exposure guidelines: Ceiling 5 mg/m<sup>3</sup> (OSHA), 0.1 mg/m<sup>3</sup> (inhalable fraction) (ACGIH)

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

Brittle, silvery metal. Odorless.

Soluble: Decomposes water. Readily dissolves in dilute mineral

acids.

Boiling point: 2097 °C Melting point: 1245 °C Specific gravity: 7.44

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

Avoid contact with acids, bases, moisture, halogens, and phosphorus.

Shelf life: Indefinite, if stored properly. See Section 7 for further information.

## **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Harmful dust. ORL-RAT LD $_{50}$ : 9 g/kg Chronic effects: Reproductive, neurological hazard. IHL-RAT LC $_{50}$ : N.A. Target organs: Nerves, lungs. SKN-RBT LD $_{50}$ : 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 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

N/A = Not applicable

## **SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (231-105-1).

#### **SECTION 16 — OTHER INFORMATION**

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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