

Material Safety Data Sheet

Section 1: Company and Product Identification



(866) 260-0501
Product Name Manganese Metal

Product No. 9419004
CAS 7439-96-5

Manufactured by:
Columbus Chemical Industries, Inc.
N4395 Terebin Rd.
Columbus, WI 53025
TEL: (920) 623-2149

24 HOUR EMERGENCY ASSISTANCE CHEMTREC 800-424-9300		
HAZARD RATING		
4- EXTREME	HEALTH	1
3- SEVERE		
2- MODERATE	FLAMMABILITY	2
1- SLIGHT		
0- MINIMAL	REACTIVITY	0

Material UsesNot available.

Synonyms Not available.
Formula Mn

Section 2: Hazardous Ingredients

Product Name	CAS	Conc (%)	PIN
Manganese Metal	7439-96-5	100	N/A

For Exposure Limits (TLV, PEL), LD50 and LC50 see section 5 of this document. * Chemical subject to the reporting of SARA Title III.

Section 3: Physical Data

Appearance	Solid.	Odor Threshold	Not available.
Color	Grayish brown.	Vapor Pressure	Not available.
Odor	Odorless.	Evaporation Rate (Reference solvent)	Not available.
Specific Gravity (Water = 1)	Not available.	Vapor Density (Air = 1)	Not available.
Melting Point	1245.04°C (2273.1°F)	Percent Volatile by Volume	Not available.
Boiling Point	2096.7°C (3806.1°F)	pH (1% water soln)	Not applicable.
Water/Oil Dist. Coeff.	Not available.	Solubility	Insoluble in cold water, hot water.

Section 4: Fire and Explosion Hazard Data

Flash Point (Methods)	Not applicable.	Autoignition Temp.	Not applicable.
Flammable Limits in Air by Volume	Not applicable.		
Flammability	Not applicable.		

Explosion Hazard Not available.

Haz. Comb. Prod. Not applicable.

Means of Extinction Not applicable.

Special Fire Fighting Procedures

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Unusual Fire and Explosion Hazards

Not available.

Section 5: Health Hazard Data

Exposure Limits ACGIH TLV (United States, 2001). STEL: 3 mg/m³ TWA: 1 mg/m³ Period: 10 hour(s) (P.E.L., TLV, etc.) OSHA PEL 1989 (United States, 1989). CEL: 5 mg/m³ STEL: 3 mg/m³ Form Fume. TWA: 1 mg/m³ Form Fume.
Acute Effects Non-irritant for skin. Non-irritating to the eyes.

Routes of Entry Not available. LD50/LC50 LD50: Oral, Rat; 9 gm/kg
LC50: Not available.

Effects of Overexposure

Repeated or prolonged exposure is not known to aggravate medical condition.

Emergency and First Aid Procedures

SKIN: Wash contaminated skin with soap and water. EYES: Flush with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention. INHALATION: Move exposed person to fresh air. If irritation persists, get medical attention. INGESTION: Do not induce vomiting. If affected person is conscious, give plenty of water to drink. Seek medical attention.

Section 6: Reactivity Data

Stability	The product is stable.	Instability Temp.	Not available.
Incompatibility	Reactive with oxidizing agents, acids.		
Degradation Prod.	Some metallic oxides.	Hazardous polymerization?	Will not occur.
Materials to Avoid	Not available.		

Section 7: Spill or Leak Procedures

Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 8: Protection Equipment Information

Equipment Safety glasses. Lab coat.

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
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Section 9: Other Information

Special Precautions Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 4).

Read label on container before using. Do not wear contact lenses when working with chemicals.

Verified by S. Quandt Effective Date Printed 11/19/2002

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

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