

MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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SECTION 1 Product Identification

CHEMICAL NAME: Manganese (II) chloride
CAS #: 13446-34-9
FORMULA: MnCl₂·4H₂O
SYNONYM: Manganese dichloride tetrahydrate

SECTION 2 Composition and Information on Ingredients

INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	13446-34-9	100	0.2mg/m ³ (as Mn)	5mg/m ³ (as Mn-ceiling limit)

SECTION 3 Hazards Identification

EMERGENCY OVERVIEW: Harmful if swallowed. Irritating to eyes, skin and respiratory tract. May cause harm to the unborn child and cause heritable genetic damage.

PRIMARY ROUTES OF EXPOSURE: Contact with skin and eyes. Inhalation of dust.

EYE CONTACT: Causes slight to mild irritation of the eyes.

SKIN CONTACT: Causes slight to mild irritation of the skin.

INHALATION: Irritating to the nose, mucous membranes and respiratory tract, and cause chronic health problems.

INGESTION: Harmful if swallowed.

CHRONIC HEALTH EFFECTS: Prolonged exposure to manganese containing dust may produce manganese pneumonitis and manganese poisoning. Symptoms include sleepiness, weakness and emotional disturbances. Equivocal studies have shown manganese may decrease fertility in men. May cause heritable genetic damage.

ACUTE HEALTH EFFECTS: Harmful if swallowed. Irritating to skin, eyes and respiratory tract. May cause harm to the unborn child.

SECTION 4 First Aid Measures

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if

conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 Firefighting Measures

FLASH POINT: not applicable

AUTO IGNITION TEMPERATURE: none

EXPLOSION LIMITS: none

EXTINGUISHING MEDIUM: None. Material is non-flammable

SPECIAL FIREFIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: none

UNUSUAL FIRE OR EXPLOSION HAZARDS: No unusual fire or explosion hazards.

SECTION 6 Accidental Release Measures

SPILL AND LEAK PROCEDURES: To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.

SECTION 7 Handling and Storage

HANDLING AND STORAGE: Store material in a tightly sealed container away from moisture. Handle under a dry atmosphere of air. Handle under a dry atmosphere of air or nitrogen. Prolonged exposure to the atmosphere may degrade the product.

SECTION 8 Exposure Controls and Personal Protection

EYE PROTECTION: Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

SKIN PROTECTION: Chemical-resistant.

VENTILATION: If possible, handle the material in an efficient fume hood.

RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

SECTION 9 Physical and Chemical Properties

COLOR AND FORM: rose xtl.

MOLECULAR WEIGHT: 125.84 (197.91)

MELTING POINT (DEG. C.): none

BOILING POINT: no data

VAPOR PRESSURE: no data

SPECIFIC GRAVITY: 2.01

SOLUBILITY IN WATER: Very soluble

SECTION 10 Stability and Reactivity

STABILITY: hygroscopic

HAZARDOUS POLYMERIZATION: no hazardous polymerization
CONDITIONS TO AVOID: contact with moisture
INCOMPATIBILITY: active metals
DECOMPOSITION PRODUCTS: Manganese diochloride and water

SECTION 11 Toxicological Information

RTECS DATA: Oral (rat); LD50: 1484 mg/kg. Intraperitoneal (rat); LD50: 138 mg/kg. Parental (rat); LD50: 225 mg/kg. Intraperitonea (mouse); LD50: 144 mg/kg. Subcutaneous (mouse); LD50: 320 mg/kg. Oral (rat); TDLo: 378 mg/kg/30D-1. Intraperitoneal (rat); TDLo: 225 mg/kg/15D-1. Intraperitoneal (rat); TDLo: 324 mg/kg/30D-1. Intraperitoneal (rat); TDLo: 540 mg/kg/90D-1. Intraperitoneal (rat); TDLo: 384 mg/kg/24W-1. Oral (rat); TDLo: 141 gm/kg. Intravenous (rat); TDLo: 47280 ug/kg.

MUTAGENIC EFFECTS: no data

TETRATOGENIC EFFECTS: no data

CARCINOGENIC EFFECTS: no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No information available

SECTION 13 Disposal Considerations

DISPOSAL: Dispose of in according to local state and federal regulations.

SECTION 14 Transportation Information

Non-hazardous

Non-hazardous

SECTION 15 Regulatory Information

TSCA: Not listed in the TSCA inventory

SARA (TITLE 313): Title compound : See category N450 for reporting.

SECTION 16 Other Information

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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