

PRMI

# MATERIAL SAFETY DATA SHEET

Emergency Phone No: Chem-Trec 1-800-424-9300

Manufacturer: ProChem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

Phone: (815) 398-1788  
Fax: (815) 398-1810  
E-Mail: Prochem1@aol.com

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** MANGANESE (II) NITRATE

**CAS#:** 15710-66-4

**FORMULA:** Mn(NO<sub>3</sub>)<sub>2</sub>.xH<sub>2</sub>O

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	15710-66-4	100	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** OXIDIZER Contact with combustible material may cause fire. May be harmful by inhalation and ingestion.

**PRIMARY ROUTES OF EXPOSURE:** Inhalation, Ingestion

**EYE CONTACT:** Causes irritation of the eyes .

**SKIN CONTACT:** Causes irritation to skin.

**INHALATION:** Causes irritation to respiratory system.

**INGESTION:** Harmful if swallowed.

**ACUTE HEALTH EFFECTS:** Irritating to eyes, skin, respiratory system.

**CHRONIC HEALTH EFFECTS:** May cause weakness, general depression, headache and mental impairment.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water (lukewarm if possible) for at least 15 minutes. Assure adequate flushing under eyelids.

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

**INHALATION:** Remove 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. Give oxygen if deemed necessary. If not breathing administer CPR. Get emergency care immediately.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm.

## SECTION 5 Firefighting Measures

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**FLASH POINT:** Not applicable

**AUTOIGNITION TEMPERATURE:** Not applicable

**EXPLOSION LIMITS:** Not applicable

**EXTINGUISHING MEDIUM:** Carbon dioxide, extinguishing powder or water spray.

**SPECIAL FIREFIGHTING PROCEDURES:** If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing. Use water spray to cool fire-exposed containers and structures.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** If involved in a fire this material may emit fumes of NOx.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** This substance is an oxidizer and its heat of reactions with reducing agents or combustibles may cause ignition.

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## SECTION 6 Accidental Release Measures

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**SPILL AND LEAK PROCEDURES:** Isolate spillage. Use adequate protection when handling. Use self-contained breathing apparatus for large spills. Absorb spill with inert materials, then place in applicable chemical waste container.

**DISPOSAL:** Retain all contaminated solage for removal and treatment. Dispose of in accordance with all waste disposal regulations.

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## SECTION 7 Handling and Storage

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**HANDLING AND STORAGE: OXIDIZER** Keep container tightly closed. Use and store this material in a cool, dry, well-ventilated area away from heat and all sources of ignition. Store away from incompatible materials. Contact with combustible material may cause fire.

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## SECTION 8 Exposure Controls and Personal Protection

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

**SKIN PROTECTION:** Chemical resistant

**VENTILATION:** Mechanical (Adequate)

**RESPIRATOR:** If ventilation if not available, a high efficiency dust respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29CFR 1910.34.

**ADDITIONAL PROTECTION:** Protection to avoid contact with clothing, shoes.( chemical-resistant lab apron, overalls, booties, sleevelets.)

**OTHER PROTECTIVE EQUIPMENT:** Eye wash and quick-drench shower facilities should be available in work area. Use in a controlled environment. Do not smoke, eat or drink in area. Avoid prolonged or repeated exposure.

**PRECAUTIONS:** OXIDIZER IRRITANT Material is irritating to mucous membranes and upper respiratory tract. Irritating to skin, eyes. May be harmful by inhalation, ingestion. Avoid contact with reducing agents. HYGROSCOPIC Picks up moisture readily from atmosphere.

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**SECTION 9****Physical and Chemical Properties**

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**COLOR AND FORM:** Pink crystal  
**MOLECULAR WEIGHT:** 178.95  
**MELTING POINT (DEG. C.):** No data  
**SPECIFIC GRAVITY (WATER = 1):** No Data  
**BOILING POINT:** No Data  
**VAPOR PRESSURE:** Not applicable  
**VAPOR DENSITY (AIR = 1):** Not applicable  
**% VOLATILE BY VOLUME:** Non volatile  
**SOLUBILITY IN WATER:** Soluble

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**SECTION 10 Stability and Reactivity**

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**STABILITY:** Stable  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** None  
**INCOMPATIBILITY:** strong reducing agents, strong acids, finely powdered metals  
**DECOMPOSITION PRODUCTS:** Fumes of NOx.

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**SECTION 11 Toxicological Information**

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**CARCINOGENIC EFFECTS:** No Data  
**MUTAGENIC EFFECTS:** No Data  
**TETRATOGENIC EFFECTS:** No Data

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

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**SECTION 12 Ecological Information**

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**ECOLOGICAL INFORMATION:** No information available

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**SECTION 13 Disposal Considerations**

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

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**SECTION 14 Transportation Information**

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Manganese Nitrate, Class 5.1, UN2724, PG III, Oxidizer label

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## **SECTION 15      Regulatory Information**

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**TSCA:** Listed in TSCA inventory

**SARA (TITLE 313):** Nitrate Compounds (Water dissociable)

**RCRA STATUS:** Meets criteria for nitrates and should be managed as a hazardous waste .

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## **SECTION 16      Other Information**

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**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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