

## Material Safety Data Sheet Manganese Nitrate

### Section 1: Chemical Product and Company Identification

Product Name : Manganese Nitrate  
Chemical Formula :  $\text{Mn}(\text{NO}_3)_2$   
Company Identification : Tradeasia International Pte Ltd  
Email Address : contact@chemtradeasia.com

### Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Manganese Nitrate	10377-66-9	100

Toxicological Data on Ingredients: Manganese nitrate LD50: Not available. LC50: Not available.

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant). Non-corrosive for skin. Non-sensitizer for skin. Non-permeator by skin. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

#### Potential Chronic Health Effects:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant). Noncorrosive for skin. Non-sensitizer for skin. Non-permeator by skin. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

### Section 4: First Aid Measures

#### Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

#### Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.

**Serious Skin Contact:** Not available.

#### Inhalation:

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

#### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

#### Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:** Not available.

### Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

### Section 6: Accidental Release Measures

#### Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

#### Large Spill:

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7: Handling and Storage

#### Precautions:

Keep away from heat. Keep away from sources of ignition. Keep away from combustible material Do not breathe gas/fumes/vapour/spray. Avoid contact with eyes Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If you feel unwell, seek medical attention and show the label when possible.

#### Storage:

Oxidizing materials should be stored in a separate safety storage cabinet or room.

### Section 8: Exposure Controls/Personal Protection

#### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

#### Personal Protection:

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

Manganese nitrate TWA: 1 STEL: 3 (mg/m<sup>3</sup>) from ACGIH Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

Physical state and appearance	: Liquid.
Odor	: Not available.
Taste	: Not available.
Molecular Weight	: Not applicable.
Color	: Not available.
pH (1% soln/water)	: Neutral.
Boiling Point	: The lowest known value is 100°C (212°F) (Water).
Melting Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: Weighted average: 1.36 (Water = 1)
Vapor Pressure	: The highest known value is 17.535 mm of Hg (@ 20°C) (Water).
Vapor Density	: The highest known value is 0.62 (Air = 1) (Water).
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: See solubility in water.
Solubility	: Easily soluble in cold water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Not available.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** No.

## Section 11: Toxicological Information

### Routes of Entry:

Eye contact. Inhalation. Ingestion.

### Toxicity to Animals:

LD50: Not available. LC50: Not available.

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant). Non-corrosive for skin. Non-sensitizer for skin. Non-permeator by skin.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:**

The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:** Not available.

## Section 14: Transport Information

**DOT Classification:** CLASS 5.1: Oxidizing material.

**Identification:**

Manganese nitrate, solution : UN2724 PG: III

**Special Provisions for Transport:**

Marine Pollutant.

## Section 15: Other Regulatory Information

**Federal and State Regulations:**

TSCA 8(b) inventory: Manganese nitrate; Water.

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):**

CLASS C: Oxidizing material.

**DSCL (EEC):**

R36- Irritating to eyes.

**HMIS (U.S.A.):**

**Health Hazard: 2**

**Fire Hazard: 0**

**Reactivity: 0**

**Personal Protection: j**

**National Fire Protection Association (U.S.A.):**

**Health: 2**

**Flammability: 0**

**Reactivity: 0**

**Specific hazard:**

**Protective Equipment:**

Not applicable. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

**Section 16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

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