

## **SAFETY DATA SHEET (SDS) MANGANESE OXIDE**

### **SECTION 1 – IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

**Manufacturer & Supplier: NUMINOR CHEMICAL INDUSTRIES LTD.**

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**Emergency Contact:** Mr. Alan Kantor, Tel: + 972-4-9978220, + 972-54-7606673  
**Chemical Name:** Manganese Oxide:

**Formula:** MnO  
**Synonyms:** Manganous Oxide  
**% Range:** 54 - 62%  
**Primary Use:** Mineral nutrient additive for the feed industry.

### **SECTION 2 - HAZARDS IDENTIFICATION**

**Classification according to Regulation (EC) 1272/2008 (GHS-CLP)**

**Acute toxicity:** Dermal (Category 3)  
Skin Irritation (Category 2)  
Eye Irritation (Category 2)  
Specific target organ toxicity-single exposure (Category 3)

**GHS Pictogram:**



**Signal Word:**

**Danger**

**Hazard Statements:**

H311 Toxic in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335: May cause respiratory irritation.

**Precautionary Statements:**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/ protective clothing.
P305 +P351 +P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a Poison Center or doctor/physician if you feel unwell.

**Environmental hazard:** None Listed.

**SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

<b>Melting Point:</b>	Not Listed.
<b>Specific Gravity:</b>	5.0
<b>Solubility in water:</b>	Insoluble
<b>Appearance &amp; Odour:</b>	Solid powder(fine),Dark brown-Green in colour, no odour.
CAS-No	1344-43-0
EINECS	215-695-8

**SECTION 4 - FIRST AID MEASURES**

**Effects and symptoms:** Chills, fever, nausea, vomiting, coughing, weakness and headaches, skin irritation.

**First aid**

- **Skin contact:** Wash immediately with plenty of water and soap/
- **Inhalation:** Remove victim to fresh air. Clean nasal cavity with water. Give oxygen if breathing difficulty. Seek medical attention. If feeling unwell, immediately seek medical attention.
- **Eye contact:** Rinse immediately with clean water for 15 minutes. If feeling unwell, immediately seek medical attention.
- **Ingestion:** Immediately rinse mouth with water. Do not induce vomiting. Give large quantities of water or milk to drink. If feeling unwell, immediately seek medical attention.

**Protection of rescue personnel:** Avoid all unnecessary exposure. Use appropriate protection (see Section 9).

**SECTION 5 – FIRE, FIGHTING & EXPLOSION DATA**

<b>Fire:</b>	Non Combustible.
<b>Flammability:</b>	Non Flammable
<b>Flash point:</b>	Not Combustible
<b>Extinguishing media:</b>	In case of fire in immediate vicinity use any extinguishing agent.
<b>Protection of fire-fighters:</b>	Use breathing apparatus (self-contained breathing apparatus with full face shield). Wear suitable protective clothing.
<b>Hazardous combustion and: Decomposition products</b>	None.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES & SPILL LEAK PROCEDURES

<b>Personal precautions:</b>	Wear suitable gloves and eye/face protection. Avoid dust creation.
<b>Environmental precautions:</b>	Avoid allowing product to enter drains, sewage system, ground water.
<b>Methods for cleaning up:</b>	Sweep up and shovel into suitable containers for disposal. Re-use or recycle waste.

## SECTION 7 - HANDLING AND STORAGE

<b>Handling &amp; storing:</b>	Good housekeeping - store in a cool dry place - keep containers shut. Avoid making dust.
<b>Packing Materials:</b>	All materials suitable.

## SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

- **Respiratory protection:** Respiratory protection equipment necessary.
- **Hand protection:** Gloves.  
Material: leather gloves, cotton gloves, rubber gloves.
- **Skin protection:** Work clothes.
- **Eye protection:** Chemical goggles or safety glasses.

### Occupational Exposure Limits

**8 Hour TLV-TWA [mg/m<sup>3</sup>] :** 0.2 (Dust)

**Engineering measures:** Mechanical ventilation is recommended.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Melting Point:</b>	Not Listed.
<b>Density:</b>	5.4 G/cm <sup>3</sup>
<b>Solubility in water:</b>	Insoluble
<b>Appearance &amp; Odour:</b>	Solid powder(fine), Dark brown - Green in colour, no odour.

## SECTION 10 - STABILITY & REACTIVITY DATA

<b>Stability:</b>	Stable under ordinary conditions
<b>Hazardous Reactions:</b>	Soluble in mineral acids. Dust explosion if mixed with fine organic material and exposed to naked flame. Violent reaction with H <sub>2</sub> O <sub>2</sub> , CaOH, and F <sub>2</sub> .

**Incompatibility (materials to avoid):** Not Applicable

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Acute toxicity</b>	
- <b>Inhalation:</b>	Can Cause chills, fever, nausea, vomiting, coughing, weakness and headaches,
- <b>Dermal:</b>	Exposure can cause skin irritation..
- <b>Ingestion:</b>	(Oral rat) LD50 = 9g/kg
<b>Dermal irritation:</b>	Can cause irritation.
<b>Eyes irritation:</b>	Not available.
<b>Chronic toxicity:</b>	Not available.
<b>Sensitization:</b>	Not available.
<b>Carcinogenicity:</b>	Not listed by IARC and ACGIH as carcinogen.
<b>Mutagenicity:</b>	Not available.
<b>Reproductive toxicity:</b>	An experimental or tumorigen and mutagen.

**Other toxicological information:** Eye, skin, respiratory kidney or liver diseases or disorders would be aggravated by repeated or prolonged exposure to this chemical. Persons with history of alcoholism, psychiatric, neurological or liver dysfunction would be expected to be at increased risk from exposure.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Persistence and degradability:</b>	Not applicable.
<b>Bioaccumulative potential:</b>	Not applicable.
<b>WGK (Germany):</b>	1
<b>Ecotoxicity:</b>	Not applicable
<b>Mobility:</b>	Not applicable.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Disposal:</b>	Comply with local regulations for disposal.
<b>Waste of residues:</b>	This material and its container should be labeled H.
<b>Contaminated packaging:</b>	Keep waste packaging separate. Waste should be disposed of in a permitted chemical waste facility.

## SECTION 14 - TRANSPORT INFORMATION

<b>Hazard Labels:</b>	Not restricted.
<b>H.S. Code:</b>	2820.9000
<b>UN - No:</b>	Not Listed.
<b>ADR/RID/ADNR/IMO-IMDG:</b>	Not restricted.
<b>Shipping Name:</b>	Manganese Oxide



**Packaging Group:** Not Applicable  
**IMDG-Marine Pollution** No  
**EMS No.** Not available.  
**MFAG Table** Not available.

## SECTION 15 – REGULATORY INFORMATION

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**Signal Word:** **Danger**

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## SECTION 16 - OTHER INFORMATION

**Date of Issue:** August 2010  
**Last update:** August 2010  
**MSDS prepared by:** AVK

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