

Enviro Manganese

SECTION 1. IDENTIFICATION

| | |
|---|--|
| Product Identifier | Enviro Manganese |
| Other Means of Identification | Fertilizer |
| Recommended Use | The user should seek the advice of the county agricultural representative or a professional agricultural consultant. |
| Restrictions on Use | None known. |
| Manufacturer/Supplier Identifier | NutriAg Limited, 39 Gail Grove, Toronto, Ontario, M9M 1M5 |
| Emergency Phone No. | Canutec, 613-996-6666, 24 hours |
| SDS No. | 0141 |
| Date of Preparation | October 05, 2016 |

SECTION 2. HAZARD IDENTIFICATION

Classification

Serious eye damage - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements



Signal Word:

Danger

Hazard Statement(s):

Causes serious eye damage.

May cause damage to organs through prolonged or repeated exposure.

Contains 3.63% of an ingredient of unknown toxicity (Oral)

Contains 22-23% of an ingredient of unknown toxicity (Dermal and Inhalation)

Precautionary Statement(s):

Prevention:

Do not breathe mist, vapours, spray.

Wear eye protection/face protection.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Get medical advice/attention if you feel unwell.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Hazard Not Otherwise Classified (HNOC).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture:

| Chemical Name | CAS No. | % | Other Identifiers |
|--------------------------------|------------|-------|-------------------|
| Manganese sulphate monohydrate | 10034-96-5 | 13-14 | N/A |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Drink plenty of water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Eye and skin irritation, nausea.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, respiratory system.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agents compatible with product and suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

During a fire, corrosive and toxic hydrogen chloride and/or chlorine gases, dipotassium oxide and other toxic and irritating fumes and gases may be formed by thermal decomposition.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapours or gases.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Wear adequate personal protective equipment.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

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Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: dike spilled product to prevent runoff. Remove or recover liquid using pumps or vacuum equipment. Do not return spilled product to its original container.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wash hands thoroughly after handling this material. Do not eat, drink or smoke while handling this product.

Conditions for Safe Storage

Store in an area that is: well-ventilated. Store in the original, labelled, shipping container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Chemical Name | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|--------------------------------|-----------------------|------|----------|---------------------|-----------|-----|
| | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Manganese sulphate monohydrate | 0.2 mg/m ³ | | | 5 mg/m ³ | | |

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Not required, if used as directed.

Respiratory Protection

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|---|---|
| Appearance | Light yellow. |
| Odour | Odourless |
| Odour Threshold | Not available |
| pH | 3 - 4 (saturated solution) |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not available |
| Flash Point | Not available |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Not available |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not available |
| Vapour Density (air = 1) | Not available |
| Relative Density (water = 1) | 1.21 - 1.22 at 20 °C (68 °F) |
| Solubility | Soluble in water |

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|---|--|
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); Not available (dynamic) |
| Other Information | |
| Physical State | Liquid |
| Bulk Density | Not available |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Prolonged exposure to high temperatures. Freezing. Incompatible materials.

Incompatible Materials

Strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), oxidizing agents (e.g. peroxides).

Hazardous Decomposition Products

During a fire, toxic carbon monoxide, carbon dioxide and other irritant gases and vapour, which may include unburned acid and toxic constituents may be generated.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|--------------------------------|------|-----------------|---------------|
| Manganese sulphate monohydrate | | 782 mg/kg (rat) | |

Skin Corrosion/Irritation

Not Classified.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Not Classified.

Skin Absorption

Not Classified

Ingestion

Not Classified.

Aspiration Hazard

Not Classified

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs.

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Respiratory and/or Skin Sensitization

Not Classified

Carcinogenicity

Not Classified

Reproductive Toxicity**Development of Offspring**

Not Classified

Sexual Function and Fertility

Not Classified

Effects on or via Lactation

Not Classified

Germ Cell Mutagenicity

Not Classified

Interactive Effects

Not Classified

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Dispose in accordance with all applicable federal, provincial, and local regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

SECTION 15. REGULATORY INFORMATION**Safety, Health and Environmental Regulations****USA****Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed, or not specifically listed.

SECTION 16. OTHER INFORMATION

| | |
|------------------------------|---|
| SDS Prepared By | NutriAg Limited |
| Phone No. | 416-636-1555 |
| Date of Preparation | October 05, 2016 |
| Date of Last Revision | October 05, 2016 |
| Revision Indicators | Not applicable. |
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