

MinorMax

SECTION 1. IDENTIFICATION

Product Identifier	MinorMax
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	NutriAg Limited, 39 Gail Grove, Toronto, Ontario, M9M 1M5
Emergency Phone No.	Canutec, 613-996-6666, 24 hours
SDS No.	0113
Date of Preparation	January 27, 2016

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Serious eye damage/eye irritation - Category 2A; Specific target organ toxicity (repeated exposure) - Category 2

GHS Label Elements



Signal Word:

Warning

Hazard Statement(s):

Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure.

Contains 34.5-39.5% of ingredients with unknown toxicity (Inhalation and dermal)

Contains 32.5-36.5% of ingredients with unknown toxicity (Oral)

Precautionary Statement(s):

Prevention:

Do not breathe mist, vapours, fume, spray.

Wash hands and skin thoroughly after handling.

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.

Get medical advice/attention if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Disposal:

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

Other Hazards

Hazard Not Otherwise Classified (HNOC).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Ethanol, 2-amino-, 2-hydroxy-1,2,3-propanetricarboxylate (salt)	17863-38-6	10-11	N/A
2-hydroxypropane-1,2,3-tricarboxylate;iron(3+)	3522-50-7	8-9	N/A
Manganese sulphate monohydrate	10034-96-5	2-3	N/A

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs get medical advice/attention. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

Ingestion

Rinse mouth with water. Get medical advice/attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Maybe harmful if inhaled. Causes respiratory tract irritation. Causes eye irritation.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, respiratory system.

Special Instructions

None known.

Medical Conditions Aggravated by Exposure

Not known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Does not burn.

In a fire, the following hazardous materials may be generated: carbon monoxide, carbon dioxide and nitrogen oxides. When heated to decomposition it may emit acrid smoke and fumes.

Special Protective Equipment and Precautions for Fire-fighters

No special precautions are necessary.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

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Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

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.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Transfer equipment should be constructed of chemical-resistant plastic or stainless steel. Do not store in aluminum or steel containers. Wear chemically protective equipment during handling. Use in a well-ventilated area. Do not breathe vapours or mists. Avoid contact with eyes, skin and clothing. Do not wear contact lenses while handling this material. Wash thoroughly after handling. Keep away from extreme heat and flame. Use caution when opening containers.

Conditions for Safe Storage

Store in an area that is: ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

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		
2-hydroxypropane-1,2,3-tricarboxylate;iron(3+)			1.0 mg/m ³			

Appropriate Engineering Controls

General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

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	Brown liquid.
Odour	Odourless
Odour Threshold	Not available
pH	6 - 7 (1% solution)
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available

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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)	1.33 - 1.34 at 20 °C (68 °F)
Solubility	Soluble in water
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

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

Freezing. Heat. Incompatible materials.

Incompatible Materials

Metals (e.g. aluminum), oxidizing agents (e.g. peroxides), reducing agents (e.g. hydroquinone), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide).

Carbon steel, aluminum alloys.

Hazardous Decomposition Products

When heated to decomposition it emits acrid smoke and irritating fumes.

Carbon monoxide and carbon dioxide

Nitrogen Oxides

Sulfur Oxides.

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

May cause irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

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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 May cause damage to organs.

Respiratory and/or Skin Sensitization

Not classified.

Carcinogenicity

Not classified.

Reproductive Toxicity**Development of Offspring**

Not Classified.

Sexual Function and Fertility

The product contains a small amount of substance that is suspected of damaging fertility or the unborn child.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Not classified.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Very toxic to fish.

Persistence and Degradability

May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Not Established.

Mobility in Soil

Not established.

Other Adverse Effects

There is no information available.

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.

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SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This section is not required by OSHA.

Canada

CEPA - National Pollutant Release Inventory (NPRI)

Part 1A. (Cobalt(II) chloride, hexahydrate)

SECTION 16. OTHER INFORMATION

Date of Preparation January 27, 2016

Revision Indicators Not applicable.

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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