



MangaMax

SECTION 1. IDENTIFICATION

Product Identifier MangaMax
Other Means of Fertilizer

Identification

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 NutriAg Limited, 39 Gail Grove, Toronto, Ontario, M9M 1M5

Identifier

Emergency Phone No. Canutec, 613-996-6666, 24 hours

SDS No. 0047

Date of Preparation August 25, 2015

SECTION 2. HAZARD IDENTIFICATION

Classification

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

Label Elements





Signal Word:

Danger

Hazard Statement(s):

Causes skin irritation.

Causes serious eye damage.

May cause damage to organs through prolonged or repeated exposure.

Contains 14-16% of ingredients of unknown toxicity (inhalation and dermal).

Contains 4-5% of ingredients of unknown toxicity (oral).

Precautionary Statement(s):

Prevention:

Do not breathe mist, vapours, spray.

Wash hands and skin thoroughly after handling.

Wear protective gloves.

Wear eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of water.

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.

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Specific treatment is advised - see first aid instructions.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Withheld as trade secret	CBI	10-11	N/A	
Withheld as trade secret	CBI	4-5	N/A	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do.

Ingestion

Rinse mouth with water. Do not induce vomiting. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

May be harmful if inhaled. Causes respiratory tract irritation.

Harmful if absorbed through skin. Causes skin irritation.

Causes eve irritation.

Harmful if swallowed.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, respiratory system, skin.

Special Instructions

Provide general supportive measures and treat symptomatically.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific Hazards Arising from the Product

By heating and fire, irritating vapours/gases may be formed.

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Special Protective Equipment and Precautions for Fire-fighters

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

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

remove residual contamination.

Other Information

See Section 8 for personal protective equipment. For waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid repeated or prolonged skin contact. Do not get in eyes. Do not breathe in this product.

Conditions for Safe Storage

Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Withheld as trade secret	0.2 mg/m3			5 mg/m3		
Withheld as trade secret	Not established					

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

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.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance Dark brown.

Odour Fruity

Odour Threshold Not available

pH 1 - 2 (1% 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 applicable

Upper/Lower Flammability or

Explosive Limit

Not applicable (upper); Not applicable (lower)

Vapour Pressure Not applicable
Vapour Density (air = 1) Not applicable

Relative Density (water = 1) 1.20 - 1.23 at 20 $^{\circ}$ C (68 $^{\circ}$ F)

Solubility Soluble in water Partition Coefficient, Not available

n-Octanol/Water (Log Kow)

Auto-ignition TemperatureNot availableDecomposition TemperatureNot available

Viscosity Not available (kinematic); Not available (dynamic)

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

Incompatible materials.

Incompatible Materials

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

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion; inhalation.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Withheld as trade secret		782 mg/kg (rat)	

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Skin Corrosion/Irritation

May cause skin irritation.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful if inhaled.

Skin Absorption

May be harmful if absorbed through the skin.

Ingestion

May be harmful if swallowed.

Aspiration Hazard

Not classified.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs If inhaled.

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

Not established.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Withheld as trade secret	30.6 mg/L (Pimephales promelas (fathead minnow); 96-hour)			

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

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Other Adverse Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable federal, provincial, and local regulations. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

SECTION 14. TRANSPORT INFORMATION

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

Other Information IMDG: Not regulated for transport.

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed, or not specifically listed.

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 August 25, 2015
Date of Last Revision February 14, 2018

Revision Indicators Version 3.3

The following SDS content was changed on August 25, 2015: SECTION 2. HAZARD IDENTIFICATION; Classification.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS; Ingredient Information. SECTION 11. TOXICOLOGICAL INFORMATION; STOT (Specific Target Organ Toxicity) -

Repeated Exposure; Reproductive Toxicity.

The following SDS content was changed on November 23, 2015:

Eve/Face Protection: Eve/Face Protection: Individual Protection Measures: Eve/Face

Protection; Skin Protection; Respiratory Protection.

The following SDS content was changed on November 21, 2016: SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity.

The following SDS content was changed on January 26, 2017:

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES; pH; Relative Density.

SECTION 12. ECOLOGICAL INFORMATION; Ecotoxicity. The following SDS content was changed on February 10, 2017: SECTION 2. HAZARD IDENTIFICATION; Label Elements. The following SDS content was changed on February 14, 2018:

Shipping Information; Other Information.

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