

SolMax

SECTION 1. IDENTIFICATION

| | |
|--------------------------------------|--|
| Product Identifier | SolMax |
| 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. | 0431 |
| Date of Preparation | March 28, 2022 |

SECTION 2. HAZARD IDENTIFICATION

Classification

Skin irritation - Category 2; Eye irritation - Category 2A; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Germ cell mutagenicity - Category 2; Carcinogenicity - Category 1B; Reproductive toxicity - Category 1B

Label Elements



Signal Word:

Danger

Hazard Statement(s):

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Suspected of causing genetic defects.

May cause cancer.

May damage fertility or the unborn child.

Contains 25-26% of ingredients with unknown toxicity (inhalation).

Contains 19-20% of ingredients with unknown toxicity (dermal).

Contains 2-3% of ingredients with unknown toxicity (oral).

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Obtain, read and follow all safety instructions before use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands and skin thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.
Wear respiratory protection (NIOSH approved air-purifying respirator with an appropriate cartridge).
IF ON SKIN: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment is advised - see first aid instructions.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If experiencing respiratory symptoms: Call a POISON CENTRE/doctor/
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.

Storage:

Store locked up.

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

Mixture:

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|--------------------------|--------------|---------|-------------------|-------------|
| Urea | 57-13-6 | 4-5 | N/A | |
| Manganese sulphate | 10034-96-5 | 3-4 | N/A | |
| Withheld as trade secret | Trade Secret | 2-3 | N/A | |
| Withheld as trade secret | Trade Secret | 1-2 | N/A | |
| Withheld as trade secret | Trade Secret | 1-2 | N/A | |
| Withheld as trade secret | Trade Secret | 0.1-0.3 | N/A | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

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 or 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. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice or attention.

Ingestion

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

Most Important Symptoms and Effects, Acute and Delayed

May be harmful if inhaled. Causes respiratory tract irritation.
Causes skin irritation.

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Causes eye irritation.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, respiratory system.

Special Instructions

None known.

Medical Conditions Aggravated by Exposure

Dermatitis.

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 Product

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

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

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

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Control Parameters

| | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|--------------------------|-----------------|------|----------|---------|-----------|-----|
| Chemical Name | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Manganese sulphate | 0.2 mg/m3 | | | 5 mg/m3 | | |
| Withheld as trade secret | 0.02 mg/m3 | | | | | |
| Withheld as trade secret | Not established | | | | | |
| Urea | | | | | 10 mg/m3 | |

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

Wear a NIOSH approved powered air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Basic Physical and Chemical Properties**

| | |
|--|--|
| Odour | Aromatic |
| Odour Threshold | Not available |
| pH | 5.5 - 6.5 (1% solution) |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Boiling point/Initial boiling point | Not available |
| Boiling 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) | 1.17 - 1.18 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.

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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 | | 782 mg/kg (rat) | |
| Withheld as trade secret | | 766 mg/kg (rat) | > 2000 mg/kg (rat) |
| Withheld as trade secret | > 450 mg/m3 (rat) (4-hour exposure) | 891 mg/kg (rat) | > 2000 mg/kg (rat) |
| Withheld as trade secret | | 308 mg/kg (rat) | 176 mg/kg (rabbit) |
| Withheld as trade secret | | 1920 mg/kg (mouse) | |
| Urea | | 8471 mg/kg (rat) | 21000 mg/kg (rabbit) |

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

May cause irritation to the respiratory tract.

Skin Absorption

Not Classified.

Ingestion

May be harmful if swallowed.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity

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May cause cancer.

Reproductive Toxicity

Development of Offspring

May harm the unborn child.

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

May be mutagenic.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Acute Aquatic Toxicity

| Chemical Name | LC50 Fish | EC50 Crustacea | ErC50 Aquatic Plants | ErC50 Algae |
|--------------------------|---|----------------|----------------------|-------------|
| Manganese sulphate | 30.6 mg/L (Pimephales promelas (fathead minnow); 96-hour) | | | |
| Withheld as trade secret | 22-48 mg/L (Pimephales promelas (fathead minnow); 96-hour) | | | |
| Withheld as trade secret | 1190 mg/L (Pimephales promelas (fathead minnow); 96-hour) | | | |

Persistence and Degradability

Not established.

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. Not regulated under IATA Regulations.

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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.

CEPA - National Pollutant Release Inventory (NPRI)

Part 1A. Cobalt (and its compounds).

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed, or not specifically listed.

Additional USA Regulatory Lists

WARNING: This product contains chemicals including lead which are known to the State of California to cause cancer and/or birth defects or other reproductive harm.

SECTION 16. OTHER INFORMATION

SDS Prepared By NutriAg Limited

Phone No. 416-636-1555

Date of Preparation March 28, 2022

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Revision Indicators Version 1.0

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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