

MATERIAL SAFETY DATA SHEET

NORTRACE® MAGNESIUM 4% SEQUESTERED

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

DISTRIBUTED BY:

UNITED AGRI PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Lignosulfonic acid, magnesium salt

PRODUCT USE: Chelated micronutrient solution

REG. NO.: Not Applicable

MSDS Number: NTMG4SEQ-11-UAP

MSDS Revisions: Sections 1, 4

Date of Issue: 01/14/11

Supersedes: 01/14/08

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - Harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. Contents may be under pressure. Use caution when opening. This liquid micronutrient chelate solution is derived from Urea, Magnesium Sulfate, and Magnesium Nitrate, and is complexed with lignosulfonic acid.

This product is a dark brown-colored solution with burned wood odor. Primary routes of entry are eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Magnesium (Mg)	4.00	Mixture	not listed
Sulfur (S)	2.70	Mixture	not listed
Other ingredients, including Urea	93.30		
Magnesium Nitrate		57-13-6	not listed
Magnesium Sulfate		10377-60-3	not listed
Lignosulfonic Acid		7487-88-9	not listed
Water		8062-15-5	not listed
		7732-18-5	not listed

4. FIRST AID MEASURES

If on skin: Remove all contaminated clothing. Wash skin and hair thoroughly with soap and water. Wash clothing before reuse. If irritation persists, get medical attention.

If in eyes: Flush with running water for at least 15 minutes while holding eyelids open to help flush out material. Get medical attention.

If swallowed: Drink 1-2 glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Keep head lower than chest to avoid aspiration into lungs. Call a physician immediately or contact poison control center.

If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen; if breathing stops, administer artificial respiration. Get medical attention immediately.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273. Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

NOTE TO PHYSICIAN: No known antidote, treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Does not flash.

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon, oxides of nitrogen, and other asphyxiants.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers may burst due to pressure build-up of ammonia.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area. Contain spill, absorb liquid with clay or other absorbent material. Sweep up material and place in container for possible land application according to label use or for proper disposal. Check local and provincial regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Open the container carefully. Contents may be under pressure and has a mild odor of ammonia. Use with adequate ventilation. Work in well ventilated area. Wear a NIOSH approved respirator for mists and vapors. Wear chemical impervious gloves, footwear, coveralls or impervious apron. Protect eyes with goggles or a face shield when handling undiluted product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in original container only. Store in PVC, PE, stainless steel, or bituminized tanks. Store in a cool, dry place below 77°F / 25°C and above 14°F / -10°C and out of direct sunlight. Avoid freezing. If product freezes, allow it to warm and then mix vigorously before use. Do not use food or drink containers for mixing or storage. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required. If odor is too strong use local ventilation.

RESPIRATORY PROTECTION: Not normally required, if vapors are too strong wear a NIOSH/MSHA approved respirator for organic vapor with dust, mist and fume filters.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA
Not listed

ACGIH TLV-TWA
Not listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Dark brown-colored solution with burned wood odor.

SPECIFIC GRAVITY (Water = 1): 1.25 g/ml

VAPOUR PRESSURE: Not established

PERCENT VOLATILE (by volume): Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

BULK DENSITY: 1.25 kg/L

BOILING POINT: 212°F/100°C

EVAPORATION RATE: (Butyl Acetate = 1): Not established

SOLUBILITY: Complete

pH: 2.5 (5% solution)

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat.

INCOMPATIBILITY: Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: May include but are not limited to oxides of carbon, oxides of nitrogen, and other asphyxiants.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): > 2000 mg/kg

Eye Irritation (rabbit): Causes irritation

Inhalation LC₅₀ (female rat): Not established.

Carcinogenic Potential: Not listed in OSHA, NTP, IARC, or ACGIH.

Target Organs: None

Acute Dermal LD₅₀ (rabbit): Not established

Skin Irritation (rabbit): May cause irritation

Skin Sensitization (Guinea Pig): Not established

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT/TDG Shipping Description: NOT REGULATED

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)

IMDG Shipping Description: NOT REGULATED

Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA

1 Health
 0 Flammability
 0 Instability

0 Least
 1 Slight
 2 Moderate
 3 High
 4 Severe

HMIS

1 Health
 0 Flammability
 0 Reactivity
 H PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed N Reactive N

WHMIS Controlled: Classification D2

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Sections 1 and 4 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

®Nortrace is a registered trademark of Loveland Products, Inc.

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and UNITED AGRI PRODUCTS CANADA, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.