

*FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or
CHEMTREC 1-800-424-9300*

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

MANUFACTURED FOR:

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

24-Hour Emergency Phone: 1-800-561-8273
Medical Emergencies (Prosar): 1-800-301-7976
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Urea, Ammonia, Phosphoric Acid, Potassium Hydroxide, Copper EDTA, Iron HOEDTA, Manganese EDTA, and Zinc EDTA

PRODUCT USE: Liquid Plant Nutrient with Micronutrients

PCP REG. NO.: Not applicable

MSDS Number: NGWE-08-UAP

MSDS Revisions: All sections

Date of Issue: 01/14/08

Supersedes: 01/14/05

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - Harmful if absorbed through the skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. 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 solution is derived from Urea, Ammonia, Phosphoric Acid, Potassium Hydroxide, Copper EDTA*, Iron HEDTA+, Manganese EDTA*, and Zinc EDTA*.

This product is a clear colorless to green-colored solution with slight ammonia 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>
Total Nitrogen (N)	16.00	Mixture	none established
Available Phosphoric Acid (P ₂ O ₅)	8.00	7664-38-2	1 mg/m ³
Soluble Potash (K ₂ O)	3.00	1310-58-3	2 mg/m ³ (C)
Copper (Cu)	0.05	67989-88-2	not listed
Iron (Fe)	0.10	Mixture	not listed
Manganese (Mn)	0.05	68015-77-0	not listed
Zinc (Zn)	0.05	67859-51-2	not listed

4. FIRST AID MEASURES

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-800-301-7976**. Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

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, ammonia, and oxides of nitrogen.

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, state and federal 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. Eye protection and gloves are suggested when handling undiluted product. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide 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: Keep container tightly closed when not in use. Store in original container only. Store in a dry place above 20°F / 6.7°C. 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 ammonia odor is too strong use an approved respirator for anhydrous ammonia.

RESPIRATORY PROTECTION: Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH/MSHA approved respirator for anhydrous ammonia.

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	ACGIH TLV-TWA
Phosphoric Acid	1 mg/m ³	1 mg/m ³
Potassium Hydroxide	not listed	2 mg/m ³ (Ceiling)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Clear colorless to green-colored solution with slight ammonia odor.

SPECIFIC GRAVITY (Water = 1): 1.20 g/ml

VAPOUR PRESSURE: Not established

PERCENT VOLATILE (by volume): Not applicable

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.

SOLUBILITY: Soluble

pH: 7.6

BULK DENSITY: 1.2 kg/L

BOILING POINT: 212°F/100°C

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

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat and cold

INCOMPATIBILITY: Strong oxidizers.

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

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): Not established

Eye Irritation (rabbit): Causes slight irritation

Inhalation LC₅₀ (female rat): Not established.

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

Acute Dermal LD₅₀ (rabbit): Not established

Skin Irritation (rabbit): May cause slight irritation

Skin Sensitization (Guinea Pig): Not established

12. ECOLOGICAL INFORMATION

Material may be toxic to fish and other aquatic organisms. Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on the product labeling.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Refillable Container: For disposal, the container may be returned to the point of purchase (dealer/distributor). It must be refilled by the dealer/distributor with the same product. 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: FERTILIZNG 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		HMIS
	1 Health	0 Least	1 Health
	0 Flammability	1 Slight	0 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

SARA Hazard Notification/Reporting

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

Reportable Quantity (RQ) under U.S. CERCLA: Phosphoric Acid (CAS: 7664-38-2) 5000 lbs.; Potassium Hydroxide (CAS: 1310-58-3) 1000 lbs.

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: All sections revised to 16-section format

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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

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*Ethylenediaminetetraacetic acid

+Hydroxyethylethylenediaminetriacetic acid

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