

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:

LOVELAND 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:** Urea Ammonium Nitrate, Ammonia, Potassium Nitrate, Sodium Borate, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, Sodium Molybdate, Zinc Oxide, and Zinc Sulfate

**PRODUCT USE:** Liquid Plant Nutrient with Micronutrients

**PCP REG. NO.:** Not applicable

**MSDS Number:** AW-14-LPI

**MSDS Revisions:** Section 1

**Date of Issue:** 02/03/14

**Supersedes:** 09/17/12

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** - May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid contact with open cuts or sores. Avoid breathing vapours. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling and using this product. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer additive is derived from Urea Ammonium Nitrate, Anhydrous Ammonia, Potassium Nitrate, Sodium Borate, Zinc Oxide, Zinc Sulfate, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, and Sodium Molybdate. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea. Eye or skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer mists. Product users should avoid prolonged or repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended.

This product is a clear dark green-coloured solution with slightly sweet non-offensive odour. 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
Soluble Potash (K <sub>2</sub> O)	2.00	7757-79-1	not listed
Boron (B)	0.02	1330-43-4	not listed
Copper (Cu)	0.15	Mixture	not listed
Iron (Fe)	0.15	Mixture	not listed
Manganese (Mn)	0.05	Mixture	not listed
Molybdenum (Mo)	0.0006	7631-95-0	not listed
Zinc (Zn)	2.70	Mixture	not listed

## 4. FIRST AID MEASURES

<b>If swallowed:</b>	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 centre or doctor. Do not give anything by mouth to an unconscious person.
<b>If in eyes:</b>	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 centre or doctor for treatment advice.
<b>If inhaled:</b>	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 centre or doctor for further treatment advice.
<b>If on skin or clothing:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for further treatment advice.

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.

## 5. FIRE FIGHTING MEASURES

<b>FLASH POINT (°F/Test Method):</b>	Does not flash.
<b>FLAMMABLE LIMITS (LFL &amp; UFL):</b>	Not established
<b>EXTINGUISHING MEDIA:</b>	Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO <sub>2</sub> ), foam, water spray or fog.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	May include but are not limited to oxides of carbon and oxides of sulfur, ammonia, and oxides of nitrogen.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	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:**

Store in original containers only. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. LOSS OF AMMONIA WILL CAUSE PRODUCT TO SOLIDIFY. Store in a cool, dry, well-ventilated place, preferably in a locked storage area. Store out of direct sunlight. Do not contaminate water, food, or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****ENGINEERING CONTROLS:**

Not normally required. If ammonia odour is too strong use local or mechanical ventilation.

**RESPIRATORY PROTECTION:**

Not normally required, if ammonia vapours are too strong wear a NIOSH 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**

Not listed

**ACGIH TLV-TWA**

Not listed

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOUR:** Clear dark green-coloured solution with slightly sweet non-offensive odour.

**SOLUBILITY:** Complete

**SPECIFIC GRAVITY (Water = 1):** 1.24 g/ml

**BULK DENSITY:** 1.24 kg/L

**pH:** 6.4

**VAPOUR PRESSURE:** Not established

**BOILING POINT:** 212°F/100°C

**PERCENT VOLATILE (by volume):** Not applicable

**EVAPORATION RATE: (Butyl Acetate = 1):** 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.

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Excessive heat. Keep containers tightly closed.

**INCOMPATIBILITY:** Strong oxidizers.

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

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (male rat):** Not established

**Acute Dermal LD<sub>50</sub> (rabbit):** Not established

**Eye Irritation (rabbit):** Causes mild irritation

**Skin Irritation (rabbit):** Causes mild irritation

**Inhalation LC<sub>50</sub> (female rat):** 2000 ppm (4 hr).

**Skin Sensitization (Guinea Pig):** Not established

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

**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. 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 Least
0 Flammability	1 Slight
0 Instability	2 Moderate
	3 High
	4 Severe

## HMIS

1 Health
0 Flammability
0 Reactivity
B PPE

**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:** Not listed

**SARA, Title III, Section 313:** Not listed

**RCRA Waste Code:** Not listed

**CA Proposition 65:** Not listed

**16. OTHER INFORMATION**

**MSDS STATUS:** Section 1 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

®Awaken 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 LOVELAND 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.