

**SAFETY DATA SHEET**

SDS NUMBER: 1000137393-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 11/20/14

**UREA 46-0-0**

SUPERSEDES: 11/16/10

**FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300****1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER****1.1 PRODUCT IDENTIFIER:****TRADE NAME:** UREA 46-0-0**1.2 RECOMMENDED USE:** FERTILIZER**1.3 SUPPLIER DETAILS:**

LOVELAND PRODUCTS, INC.

P.O. Box 1286 • Greeley, CO 80632-1286

**1.4 24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565**U.S. Coast Guard National Response Center:** 1-800-424-8802**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to 29 CFR 1910.1200**

Eye Irritation	Category 2B	H320
Skin Irritation	Category 2	H315
STOT SE	Category 3	H335

**2.2 Label elements****Signal word:** WARNING

**Hazard Statement:**  
 H320 – Causes eye irritation.  
 H315 – Causes skin irritation.  
 H335 – May cause respiratory irritation.

**Precautionary Statement:**

P261 – Avoid breathing dust / fume / gas / mist / vapors / spray  
 P264 - Wash...thoroughly after handling.

**(Prevention):**

P271 - Use only outdoors or in a well-ventilated area.  
 P280 – Wear protective gloves / protective clothing / eye protection / face protection

**Precautionary Statement:****(Response):**

P305+P351+P338 – IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and continue rinsing eyes.  
 P302+P352 – IF ON SKIN: Wash with plenty of water for 15 to 20 minutes  
 P304+P340 – IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

**Precautionary Statement:****(General):**

P101+P102+P103 – If medical advice is needed, have product container or label available at hand. Keep out of reach of children. Read label before use

**2.3 Other hazards**

None known

**KEEP OUT OF REACH OF CHILDREN –**

Appearance and odor: White granular solid with faint ammonia odor.

**WARNING****Potential Health effects****Routes of exposure** Eye contact, skin contact, inhalation. Avoid breathing spray mist.**Eyes** Causes eye irritation.**Skin** Cause skin irritation.**Inhalation** May cause respiratory irritation.**Ingestion** May be harmful if swallowed.**Target organs**

Eyes. Skin. Inhalation.

**Signs and symptoms**

May be harmful if absorbed through skin.

**Potential environmental effects**

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

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**3. COMPOSITION, INFORMATION ON INGREDIENTS****3.1 Substances****Classification according to 29 CFR 1910.1200**

Chemical Name:	CAS No.	Classification	Concentration [%]
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**3.2 Mixtures****Classification according to 29 CFR 1910.1200**

Chemical Name:	CAS No.	Classification	Concentration [%]
Urea	57-13-6	Eye Irrit. 2B: H320 Skin Irrit.: 2 H315 STOT SE 3: H335	95.00 - 100.00

**4. FIRST AID MEASURES****4.1 Description of First Aid Measures**

General Advice: Get medical attention if symptoms occur.

**Eye contact:** Hold eye 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.

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

**Ingestion:** 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.

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

**4.2 Most Important Symptoms and Effects, Acute and Delayed**

Symptoms: Causes eye irritation.

**4.3 Immediate Medical Attention and Special Treatment**

Treatment: Treat symptomatically. Symptoms may be delayed.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565**

Take container, label or product name with you when seeking medical attention.

**NOTES TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.**5. FIRE FIGHTING MEASURES****5.1 EXTINGUISHING MEDIA:**Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO<sub>2</sub>), foam, water spray or sand. Do not use heavy water stream.**5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

Specific Hazards During Firefighting: During a fire, hazardous by-products can be released.

**5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS**

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

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**6. ACCIDENTAL RELEASE MEASURES****6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

**6.2 ENVIRONMENTAL PRECAUTIONS**

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers, or watercourses.

**6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP**

Methods for Clean-Up: Large Spills: Sweep or shovel into suitable containers.  
Small Spills: Sweep or shovel into suitable containers.  
Remove residual contamination.  
Never return spills to original containers for re-use.

**7. HANDLING AND STORAGE****7.1 PRECAUTIONS FOR SAFE HANDLING:**

Advice on Safe Handling: Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

**7.2 CONDITIONS FOR SAFE STORAGE:**

Requirements for Storage Areas and Containers: Store in cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Product will become thicker at cold temperatures but effectiveness will not be affected. Warm product before use. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1 CONTROL PARAMETERS:****OCCUPATIONAL EXPOSURE LIMITS****U.S. Workplace Exposure Level (WEEL) Guides**

Components	Type	Value
Urea (CAS: 57-13-6)	TWA	10 mg/m <sup>3</sup>

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Specimen
No listings		

**8.2 EXPOSURE CONTROLS:****Engineering Measures**

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

**Individual Protection Measures:**

Eye / Face Protection: Goggles or shielded safety glasses are recommended.  
Skin Protection: Wear protective gloves. Long-sleeved shirt, long pants, and socks.  
Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**9.1 APPEARANCE :** Granular solid.  
**ODOR:** Faint ammonia.  
**ODOR THRESHOLD:** No data available.  
**COLOR:** White.  
**pH:** 8 – 8.5 (10% solution)  
**MELTING POINT / FREEZING POINT:** 270.86° (132.7°C)  
**BOILING POINT:** Not applicable.  
**FLASH POINT:** Not flammable.  
**FLAMMABILITY (solid, gas):** No data available.  
**UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** No data available.  
**VAPOR PRESSURE:** No data available.  
**SOLUBILITY:** Complete  
**PARTITION CO-EFFICIENT, n-OCTANOL / WATER:** No data available.  
**AUTO-IGNITION TEMPERATURE:** No data available.  
**DECOMPOSITION TEMPERATURE:** No data available.  
**VISCOSITY, kinematic:** No data available.  
**SPECIFIC GRAVITY (Water = 1):** 0.67 g/ml – 0.83 g/ml  
**BULK DENSITY:** 42 - 52 lbs./ft<sup>3</sup> / 672.8 kg/m<sup>3</sup> – 833 kg/m<sup>3</sup>

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.

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## 10. STABILITY AND REACTIVITY

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### 10.1 REACTIVITY

Reacts violently with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing a fire and explosion hazard.

### 10.2 CHEMICAL STABILITY

Stable under normal temperature conditions. May give off ammonia.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

### 10.4 CONDITIONS TO AVOID

Moisture. High temperatures.

### 10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents. Nitric acid. Nitrites.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon. Oxides of Nitrogen. Ammonia. Biuret.

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## 11. TOXICOLOGICAL INFORMATION

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### 11.1 LIKELY ROUTES OF EXPOSURE

Eye contact. Skin contact.

**LC<sub>50</sub> (rat):** No data available.

**LD<sub>50</sub> Oral (rat):** 14,300 mg/kg

**LD<sub>50</sub> Dermal (rat):** >3,200 mg/kg

**Acute Toxicity Estimates:** No data available

**Skin Irritation (rabbit):** Causes skin irritation.

**Eye Irritation (rabbit):** Causes eye irritation.

**Specific Target Organ Toxicity:** Single exposure: No data available.

**Aspiration:** No data available

**Skin Sensitization (mouse):** Not a sensitizer

**Carcinogenicity:** No data available

**Germ Cell Mutagenicity:** No data available

**Interactive Effects:** None known

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**12. ECOLOGICAL INFORMATION****12.1 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.

**Ecotoxicological Data**

	<b>Species</b>	<b>Test Results</b>
Product 96-hour LC <sub>50</sub>	Leuciscus idus	LC <sub>50</sub> >6,810 mg/L

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

**12.2 PERSISTENCE AND DEGRADABILITY**

Biodegradability: No data available

**12.3 BIOACCUMULATIVE POTENTIAL**

Bioaccumulation: No data available.

**12.4 MOBILITY IN SOIL**

No data available.

**12.5 OTHER ADVERSE EFFECTS**

Assessment: No data available.

**13. DISPOSAL CONSIDERATIONS****13.1 WASTE TREATMENT METHODS**

Do not reuse empty bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food or feed by storage or disposal.

**14. TRANSPORT INFORMATION****14.1 LAND TRANSPORT**

**DOT Shipping Description:** NOT REGULATED.

**U.S. Surface Freight Classification:** FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, DRY (NMFC 68140, SUB 5; CLASS 50)

**15. REGULATORY INFORMATION****15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS****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

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**SARA Hazard Notification/Reporting****SARA Title III Hazard Category:**Immediate Y  
Delayed NFire N  
Reactive NSudden Release of Pressure N**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 applicable

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**16. OTHER INFORMATION**

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**SDS STATUS:** All sections reviewed; change in format**PREPARED BY:** Registrations and Regulatory Affairs**REVIEWED BY:** Environmental Health and Safety

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