

SAFETY DATA SHEET

SDS NUMBER: 1000136692-15-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 03/25/15

44-0-0
SUPERSEDES: NEW

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: **44-0-0 WITH ESN®**

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

Not classified

2.2 Label elements

Not applicable

Signal word: None

Hazard Statement: No significant effects or critical hazards.

Precautionary Statement:

Not applicable.

(Prevention):
Precautionary Statement:

Not applicable.

(Response):
Precautionary Statement:
(General):

Read label before use. Keep out of reach of children. If medical advice is needed, have the product container or label at hand.

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN –

Appearance and odor: Multi-colored granules with dusty odor.

Potential Health effects

Routes of exposure Avoid breathing fertilizer dusts.

Eyes May cause eye irritation.

Skin May cause skin irritation.

Inhalation May be irritating to respiratory system.

Ingestion May be irritating to mouth, throat, and stomach.

Target organs Eyes. Skin. Inhalation.

Signs and symptoms May be harmful if swallowed, absorbed through skin or inhaled.

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

3.2 Mixtures

Chemical Name:	CAS No.	Classification	Concentration [%]
		Not classified	
Urea	57-13-6		>95.00
Castor oil, polymer with polymethylenepolyphenylene isocyanate	67700-69-0		4.00
Urea, reaction products with formaldehyde	68611-64-3		<1.00
Imidodicarbonic diamide (Biuret)	108-19-0		<1.00

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

Eye contact: No significant effects or critical hazards.
Ingestion: No significant effects or critical hazards.
Skin contact: No significant effects or critical hazards.
Inhalation: No significant effects or critical hazards.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: No specific data. May cause eye irritation due to mechanical action.

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: 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: Foam, carbon dioxide (CO₂), dry powder, water spray. Do not use water jet as this will spread the fire.**5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

Specific Hazards During Firefighting: During a fire, oxides of carbon and oxides of nitrogen 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, dusts 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: Stop the flow of material, if this is without risk. Vacuum or sweep up material and place in a designated, labeled waster container or recover as much material as possible and use for its intended purpose.
Small Spills: Same as above.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Avoid inhalation of dusts, vapors / spray and contact with eyes, skin and clothing. Do not breathe dusts, mist 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 original container. Keep tightly closed. Do not reuse empty container. 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 (AIHA) WEELs

Components	Type	Value
Urea (CAS: 57-13-6)	TWA	10 mg/m ³
Particulates (PNOC**)	TWA	15 mg/m ³

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: Routinely wash work clothing and protective equipment to remove contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of dusts or vapors, use suitable respiratory equipment such as MSHA/NIOSH approved respirator with approved filters. Wear respiratory protection during operations where dusting 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

9.1 APPEARANCE : Granular solid
ODOR: Dusty.
ODOR THRESHOLD: No data available.
COLOR: Multi-colored.
pH: No data available.
MELTING POINT / FREEZING POINT: Melting Point: 271.4°F (133°C)
BOILING POINT: No data available
FLASH POINT: No data available
FLAMMABILITY (solid, gas): Non-flammable substance. Non-combustile.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not applicable.
VAPOR PRESSURE: 0.011 kPa (0.8 mm Hg) (at room temperature).
SOLUBILITY: Appreciable
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY, dynamic: No data available
SPECIFIC GRAVITY (Water = 1): 0.78 g/ml
BULK DENSITY: 48.7 lbs./ft³ / 780 kg/m³

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

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

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

10.4 CONDITIONS TO AVOID

None known.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact.

LC₅₀ (rat): No data available

LD₅₀ Oral (rat): 8,471 mg/kg (Urea)

LD₅₀ Dermal (rat): No data available

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): Non-irritating

Eye Irritation (rabbit): May cause irritation due to mechanical action.

Specific Target Organ Toxicity: Single exposure: Non-irritating to the respiratory system.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

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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. This product is not intended for use in aquatic settings.

Ecotoxicological Data**Components****Species****Test Results**

Urea

Daphnia magna

3,910 mg/l 96-hour EC₅₀

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: <-1.73 LogP_{ow}.

12.4 MOBILITY IN SOIL

Soil/water partition coefficient (K_{oc}) 0.037.

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****HMIS**

1 Health

0 Least

1 Health

0 Flammability

1 Slight

0 Flammability

0 Instability

2 Moderate

0 Reactivity

3 High

B PPE

4 Severe

SARA Hazard Notification/Reporting**SARA Title III Hazard Category:**

Immediate

Y

Fire

N

Sudden Release of Pressure

N

Delayed

N

Reactive

N

Reportable Quantity (RQ) under U.S. CERCLA: No listings

SARA, Title III, Section 313: Zinc compounds

RCRA Waste Code: Not listed

CA Proposition 65: Not applicable

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16. OTHER INFORMATION

SDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

**PNOC: Particulates, not otherwise classified

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