

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

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

PRODUCT NAME: N-PUT™ 25-0-0
CHEMICAL NAME: Proprietary blend of Urea, Methylene Diurea, and Methylene Ureas
CHEMICAL FAMILY: Aqueous, organic salt solution
EPA REG. NO.: not applicable
MSDS Number: 7103988-09-LPI

MSDS Revisions: New

Date of Issue: 06/15/09

Supersedes: New

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 vapors. 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 liquid fertilizer is derived from a proprietary blend of Urea, Methylene Diurea, and Methylene Ureas. 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 green-colored liquid with a slight amine odor.

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)	25.00	Mixture	none established
Fertilizer salts and inert ingredients	75.00		

4. FIRST AID MEASURES

If in eyes: Flush with clean running water for at least 15 minutes. If irritation persists, get medical attention.
If on skin: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.
If swallowed: If unconscious, drink 1 or 2 glasses of water. Get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person.
If inhaled: Remove to fresh air. If irritation persists, get medical attention.
FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

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 and oxides of sulfur, 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: Heating to dryness may cause the release of ammonia and carbon dioxide. This ammonia, NH₃, may form flammable mixtures (16-25%) with air. Intense heat may cause the release of ammonia vapors. Cool containers with water spray.

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.
STORAGE: Store in original containers only. Keep containers tightly closed when not in use. Store out of direct sunlight in a cool, dry well-ventilated area, preferably in a locked storage area away from children, feed and food products, seed, and combustibles. Store at temperatures less than 105°F/40.6°C. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required. Use local or mechanical ventilation.
RESPIRATORY PROTECTION: Not normally required, if vapors 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 plus socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA
None listed

ACGIH TLV-TWA
None listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, green-colored liquid with slight amine odor. **SOLUBILITY:** Soluble
SPECIFIC GRAVITY (Water = 1): 1.21 g/ml **BULK DENSITY:** 10.10 lbs/gal. **pH:** 8.5 (typical)
VAPOR PRESSURE: Not established **BOILING POINT:** 212°F/100°C
PERCENT VOLATILE (by volume): Not established **EVAPORATION RATE:** 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: Avoid contact with acids or acid materials. Avoid storage, piping, or handling systems made of copper, zinc, or their alloys (bronze, brass, galvanized metals, etc.).
INCOMPATIBILITY: Strong oxidizers such as nitrates, nitrites, or chlorates can cause explosive mixtures if heated to dryness. .
HAZARDOUS DECOMPOSITION PRODUCTS: Heating to dryness may cause the release of ammonia and carbon dioxide. This ammonia, NH₃, may form flammable mixtures (16-25%) with air.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): Not established **Acute Dermal LD₅₀ (rabbit):** Not established
Eye Irritation (rabbit): Not established **Skin Irritation (rabbit):** May cause skin irritation
Inhalation LC₅₀ (rat): Not established. **Skin Sensitization (guinea pig):** not established.
Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

12. ECOLOGICAL INFORMATION

Do not contaminate water supplies.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. Rinse container thoroughly, adding rinsate to mixing tank. Then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Avoid contaminating water by disposal of equipment wash waters or other product wastes..

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT
Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)
 Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes

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 Y Fire N Sudden Release of Pressure N
Delayed N Reactive 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 listed

16. OTHER INFORMATION

MSDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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