

MATERIAL SAFETY DATA SHEET

QUAD-9 9-9*-9

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED 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: QUAD-9 9-9*-9

CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Suspension

CHEMICAL FAMILY: Low Chloride Calcium Suspension

MSDS Number: 1000295805-12-LPI

MSDS Revisions: New

Date of Issue: 06/08/12

Supersedes: New

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION – May cause mild eye and skin irritation. Avoid contact with skin, eyes, open cuts, or sores. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer suspension is derived from Calcium Nitrate, Calcium Ammonium Nitrate, Urea, Potassium Nitrate, Potassium Hydroxide, and Phosphorous Acid. 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. Wash thoroughly after handling and using this product.

This product is a green suspension with slight 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) (from Calcium Nitrate, Ammonium Nitrate, Potassium Nitrate, Urea)	9.00	10124-37-5 6484-52-2 7757-79-1 57-13-6	not listed not listed not listed not listed
Total Phosphoric Acid (P ₂ O ₅) (from Phosphorous Acid)	9.00	13598-36-2	not listed
Soluble Potash (K ₂ O) (from Potassium Nitrate, Potassium Hydroxide)	9.00	7757-79-1 1310-58-3	not listed 2 mg/m ³ C
Calcium (Ca) (from Calcium Nitrate, Fertilizer salts and inert ingredients)	9.00 64.00	10124-37-5	not listed not listed

4. FIRST AID MEASURES

If in eyes:	Flush with clean running water for 15 minutes. If irritation persists, get medical attention.
If on skin or clothing:	Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.
If swallowed:	If conscious, drink large quantities 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.
NOTES TO PHYSICIAN:	Ammonium nitrate has been used as a diuretic in oral doses of 2 to 4 grams. Average or large doses may cause nausea and vomiting. Acidosis may occur in presence of impaired renal function; also during prolonged use in person with normal kidney function. Nitrite formation in intestines may cause methemoglobinemia.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method) :	Does not flash.
FLAMMABLE LIMITS (LFL & UFL):	Ammonia gas: LFL: 16%; UFL: 25%.
EXTINGUISHING MEDIA:	Use media appropriate for surrounding fire.
HAZARDOUS COMBUSTION PRODUCTS:	Ammonia gas may evolve from product at high temperatures.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self-contained breathing apparatus and full protective gear. If heated to dryness, immediately ventilate the structure to prevent pressure build-up, which will increase the possibility of explosion.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Product may burn if all water has evaporated or boiled away.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wear appropriate personal protective equipment (refer to Section 8). Pick up the material with absorbent material and place in a container for proper disposal in accordance with local, state and federal regulations.

ENVIRONMENTAL PRECAUTIONS: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wear protective eyewear and chemical resistant gloves. Wash thoroughly with soap and water after handling.
STORAGE: Store in a cool, well-ventilated area away from heat or flame. Store in original container. Store at temperatures between 41°F and 104°F (5°C and 40°C). Keep tightly closed. In handling system or storage, avoid the formation of solid material from evaporation or salting out. Do not reuse empty container. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in well-ventilated area. Local exhaust may be required if working in confined space.
RESPIRATORY PROTECTION: Wear a NIOSH approved air-purifying respirator for pesticide handling if necessary.
EYE PROTECTION: Chemical goggles or face-shield.
SKIN PROTECTION: Wear long sleeved shirt, long pants, shoes and socks.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Potassium Hydroxide	not listed	2 mg/m ³ C (ceiling)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Green suspension with slight odor. **SOLUBILITY:** Soluble
SPECIFIC GRAVITY (Water = 1): 1.557 g/ml **pH:** 2.5 (10% solution)
VAPOR PRESSURE: Not established **BULK DENSITY:** 13.00 lbs/gal.
PERCENT VOLATILE (by volume): Not established **BOILING POINT:** 226 – 230°F (107.8 – 110°C)
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 excessive heat under confinement.
INCOMPATIBILITY: Avoid mixing with oxidizing materials. Do not mix with combustible materials, wood chips, organic materials, flammable liquids, chlorides, perchlorates, or sulfur. Avoid contact with alkalis. Incompatible with aluminum + formamide; dimethylformamide
HAZARDOUS DECOMPOSITION PRODUCTS: May release toxic fumes of ammonia, oxides of carbon, oxides of nitrogen, hydrogen chloride, ammonium chloride, and chlorine in a high temperature or fire situation.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5000 mg/kg **Acute Dermal LD₅₀ (rabbit):** >2000 mg/kg
Eye Irritation (rabbit): May irritate eyes **Skin Irritation (rabbit):** May irritate skin
Inhalation LC₅₀ (rat): Not established. **Skin Sensitization:** Not a sensitizer.
Carcinogenic Potential: Not listed by OSHA, NTP, IARC, and ACGIH as a known human carcinogen

12. ECOLOGICAL INFORMATION

Do not contaminate water supplies.

13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Triple rinse (or equivalent), and add rinsate to spray tank, then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wash waters or spray waste.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT.
Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 6; CLASS 70)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	1 Health	0 Least	1 Health
	0 Flammability	1 Slight	0 Flammability
	1 Instability	2 Moderate	1 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: Zinc (CAS: 7440-66-6) 1,000 lbs.; Ammonia (CAS: 7664-41-7) 1,000 lbs.

SARA, Title III, Section 313: Zinc (CAS: 7440-66-6); Ammonia (CAS: 7664-41-7)

RCRA Waste Code: Not listed

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER INFORMATION

MSDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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