

# MATERIAL SAFETY DATA SHEET

# QUAD 7™ SPRAY ADJUVANT

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:** 1-800-301-7976  
**U.S. Coast Guard National Response Center:** 1-800-424-8802

**PRODUCT NAME:** QUAD 7™ SPRAY ADJUVANT  
**CHEMICAL NAME:** Alcohol Ethoxylate and Ammonium Nitrate  
**CHEMICAL FAMILY:** Adjuvant  
**CA REG. NO.:** Not applicable  
**WA REG. NO.:** Not applicable  
**MSDS Number:** 8200560-10-LPI **MSDS Revisions:** Section 1

**Date of Issue:** 07/20/10 **Supersedes:** 03/11/08

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN - CAUTION** - Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear and chemical resistant gloves. Wash thoroughly with soap and water after handling. Primary routes of entry are eye contact and skin contact. Remove contaminated clothing and wash clothing before reuse.

This product is a clear, slightly viscous, light blue liquid with Ammonia-like odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Alcohol Ethoxylate and Ammonium Nitrate	42.00	Mixture	Not established
Other Ingredients	58.00		

## 4. FIRST AID MEASURES

**If in eyes:** Flush with plenty of water for 15 minutes, and then get medical attention.  
**If on skin or clothing:** Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation persists.  
**If swallowed:** Call a physician immediately. DO NOT induce vomiting, give fluids.  
**If inhaled:** Remove to fresh air. Apply artificial respiration if necessary.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** > 212°F / > 100°C. This is an aqueous material.  
**FLAMMABLE LIMITS (LFL & UFL):** Not established  
**EXTINGUISHING MEDIA:** Water, using straight stream nozzles. Water is effective in desensitizing molten or contaminated nitrate.  
**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide and/or carbon dioxide  
**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 explode if heated to dryness. Organic and oxidizing materials can sensitize dry ammonium nitrate to a readily explosive state. Can detonate if heated under confinement with high pressure.

## 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, dry place. 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**

**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.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
For product	not listed	not listed

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b> Clear, slightly viscous, light blue liquid with Ammonia-like odor.	<b>SOLUBILITY:</b> Miscible
<b>SPECIFIC GRAVITY (Water = 1):</b> 1.109 g/ml	<b>BULK DENSITY:</b> 9.25 lbs/gal.
<b>VAPOR PRESSURE:</b> 20°C @ 17.5 mm Hg	<b>BOILING POINT:</b> Not established
<b>PERCENT VOLATILE (by volume):</b> 46.4%	<b>EVAPORATION RATE:</b> < 1 (n-Butyl Acetate = 1)

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:** Contact with strong oxidizing agents, bases, acids, aldehydes, ketones, acrylates, organic anhydrides, organic halides, powdered metals. Copper represents the greatest contamination hazard.  
**INCOMPATIBILITY:** Strong oxidizing agents, bases, acids, aldehydes, ketones, acrylates, organic anhydrides, organic halides, powdered metals. Copper represents the greatest contamination hazard.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Ammonia, oxides of nitrogen, and oxides of carbon.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub> (rat):</b> 4630 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> >2000 mg/kg
<b>Eye Irritation (rabbit):</b> Moderate eye irritant	<b>Skin Irritation (rabbit):</b> Mild skin irritant
<b>Inhalation LC<sub>50</sub> (rat):</b> 4.73 mg/L.	<b>Skin Sensitization:</b> Not a sensitizer.

**Carcinogenic Potential:** Not listed by OSHA, NTP, IARC, and ACGIH as a known human carcinogen

**12. ECOLOGICAL INFORMATION**

May be toxic to fish and aquatic invertebrates.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse product containers. Triple rinse (or equivalent), adding rinse water 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, food or feed by storage or disposal.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED BY USDOT.  
**Freight Classification:** ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60)

**15. REGULATORY INFORMATION**

<b>NFPA &amp; HMIS Hazard Ratings:</b>		NFPA		HMIS
		2 Health	0 Least	2 Health
		1 Flammability	1 Slight	1 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:** Section 1 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/Regulatory Services

*™Quad 7 is a trademark of Loveland Products, Inc.*

*U.S. Patent No. 5,658,855*

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