

MATERIAL SAFETY DATA SHEET

LIBERATE™

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 Industries, Inc.
P.O. Box 1289 • Greeley, CO 80632-1289

24-Hour Emergency Phone: 1-800-424-9300
Medical Emergencies: 1-800-301-7976

PRODUCT NAME: LIBERATE™
CHEMICAL NAME: Lecithin, methyl esters of fatty acids, and alcohol ethoxylate
CHEMICAL FAMILY: Surfactant Mixture
CALIF. REG. NO.: 36208-50038
WA REG. NO.: AW36208-01002
MSDS Number: LIB-03

MSDS Revisions: All sections reviewed and/or revised

Date Of Issue: 10/15/03

Supersedes: 12/25/01

2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Lecithin, methyl esters of fatty acids, and alcohol ethoxylate	100.00	Mixture	none established

3. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION – Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

This product is brown liquid with a bland odor

4. FIRST AID MEASURES

If in Eyes: Flush with water for 15 minutes, then get medical attention.
If on Skin: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops.
If Swallowed: Call a physician immediately. Drink two (2) glasses of water. Induce vomiting.
If Inhaled: Remove victim to fresh air; apply artificial respiration if necessary.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): >212°F / >100°C (TCC)
FLAMMABLE LIMITS (LEL & UEL): Not established
EXTINGUISHING MEDIA: Carbon dioxide (CO₂), dry chemical or water spray.
HAZARDOUS COMBUSTION PRODUCTS: None known.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Dike area to contain run-off and prevent contamination of water supplies.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wear appropriate personal protective equipment (refer to Section 8) when responding to spills. Shut off source of leak if safe to do so. Dike and contain spill. Soak up residue with absorbent such as clay, sand or other suitable material and dispose of properly. Flush area with water to remove trace residue. Contain runoff from residue flush and dispose of properly. Place in container 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: Wear impervious gloves when handling. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Keep away from children, feed and foodstuffs, fertilizers and seed.
STORAGE: Store in a cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Product will become thicker at cold temperatures. Warm product before use. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in well-ventilated area. Local ventilation may be required if working in confined spaces.
RESPIRATORY PROTECTION: Wear a NIOSH approved respirator for pesticides if necessary.
EYE PROTECTION: Chemical goggles or shielded safety glasses.
SKIN PROTECTION: Wear long sleeved shirt, long pants, and shoes with socks. Wear impervious rubber or chemical-resistant gloves.

For product

OSHA PEL 8 hr TWA
not established

ACGIH TLV-TWA
not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Brown liquid with mild odor**SPECIFIC GRAVITY (Water= 1):** 0.976 g/ml**VAPOR PRESSURE:** Not established**PERCENT VOLATILE (by volume):** 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.

BULK DENSITY: 8.14 lbs/gal.**BOILING POINT:** Not established**EVAPORATION RATE:** Not established**SOLUBILITY:** Emulsifies**pH:** 6.8 (1% solution)

10. STABILITY AND REACTIVITY

STABILITY: Stable**CONDITIONS TO AVOID:** None known.**INCOMPATIBILITY:** None known.**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Monoxide from burning.**HAZARDOUS POLYMERIZATION:** Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5000 mg/kg [EPA Category IV]**Eye Irritation (rabbit):** Not an irritant [EPA Category IV]**Inhalation LC₅₀ (rat):** Not established**Carcinogenic Potential:** None listed by OSHA, NTP, IARC, and ACGIH as a carcinogen**Acute Dermal LD₅₀ (rat):** >2000 mg/kg [EPA Category IV]**Skin Irritation (rabbit):** Moderate skin irritant [EPA Category III]**Skin Sensitization:** Not a sensitizer

12. ECOLOGICAL INFORMATION

Aquatic Acute Toxicity**Rainbow Trout -** 96 HR LC₅₀: 17.6 mg/L

NOEC: 12.5 mg/L

Daphnia Magna - 48 HR EC₅₀: 9.3 mg/L

NOEC: 7.5 mg/L

13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Plastic Jugs: Triple rinse (or equivalent), adding rinse water to spray tank, then offer for recycling at an ACRC site or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

14. TRANSPORT INFORMATION

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

1 Health

0 Flammability

0 Instability

0 Least

1 Slight

2 Moderate

3 High

4 Severe

HMIS

1 Health

0 Flammability

0 Reactivity

H PPE

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

Immediate

Y

Delayed

N

Fire

N

Reactive

N

Sudden 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 listed

16. OTHER

MSDS STATUS: All sections reviewed and/or revised**PREPARED BY:** Registrations and Regulatory Affairs**REVIEWED BY:** Environmental/ Regulatory Services

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