LIBERATE® SDS NUMBER: 1000009716-14B-LPI **SUPERSEDES: 05/02/14 SDS REVISIONS: FORMAT DATE OF ISSUE: 07/08/14**

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

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT IDENTIFIER:

TRADE NAME: **LIBERATE® WITH LECI-TECH®**

1.2 RECOMMENDED USE: PENETRANT - DEPOSITION AID - DRIFT CONTROL AGENT

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

HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

H313 Acute Toxicity (Dermal) Category 5

2.2 Label elements

None

Signal word: WARNING

Hazard Statement: H313 - May be harmful in contact through skin.

Precautionary

Statement: P261 - Avoid breathing dust / fume / gas / mist / vapors / spray

P273 - Avoid release to the environment

(Prevention): P280 - Wear protective gloves and eye / face protection

Precautionary

P305 and P351 and P338 - IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and Statement:

continue rinsing eyes. (Response):

P302 and P352 - IF ON SKIN: Wash with plenty of water for 15 to 20 minutes

Precautionary Statement:

P101 and P102 and P103 - If medical advice is needed, have product container or label available. Keep out of reach of (General):

children. Read label before use

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN -

Appearance and odor: Brown liquid with mild odor.

WARNING - CATEGORY 5 MAY BE HARMFUL IN CONTACT WITH SKIN - POSSIBLE MUCOUS MEMBRANE IRRITATION

Potential Health effects

Routes of exposure Eye contact, skin contact, inhalation. Avoid breathing spray mist.

Eyes May irritate eyes.

Skin May be harmful if in contact with skin. Inhalation May be irritating to respiratory system.

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

Target organs Skin. Eyes. Inhalation.

Signs and symptoms May be harmful if absorbed through skin.

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.

COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

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3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name: CAS No. Classification Concentration [%] I ecithin 8002-43-5 Not classified 67784-80-9 Methyl esters of fatty acids H320 Alcohol ethoxylate 34398-01-1 H319, H315 100.00

FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 Eye contact:

minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or

doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to

swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth

to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by

mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Harmful if absorbed through skin. Symptoms

Immediate Medical Attention and Special Treatment

Treat symptomatically. Symptoms may be delayed. Treatment:

> FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565 Take container, label or product name with you when seeking medical attention.

Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote. Treatment of exposure NOTES TO PHYSICIAN: should be directed at the control of symptoms and the clinical condition of the patient.

FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog. 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, hazardous by-products 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.

ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors 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. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush

contaminated area thoroughly with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

Remove residual contamination.

Never return spills to original containers for re-use.

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HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling:

Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists 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 cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Product will become thicker at cold temperatures but effectiveness will not be affected. Warm product before use. Do not contaminate water, food or feed by storage or disposal.

EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) Guides

Components Type Value

No listings TWA

Biological limit values

ACGIH Biological Exposure Indices

Components 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: Coveralls worn over long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant footwear plus

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as

MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying 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.

PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Liquid Mild. ODOR:

> ODOR THRESHOLD: No data available. COLOR: Brown.

pH: 6.8 (1% solution)

MELTING POINT / FREEZING POINT: No data available **BOILING POINT:** No data available FLASH POINT: >212°F (100°C) / TCC FLAMMABILILITY (solid, gas): No data available.

UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.

VAPOR PRESSURE: No data available. SOLUBILITY: **Emulsifies**

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): 0.976 g/ml

BULK DENSITY: 8.14 lbs./gal / 0.98 kg/L

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.

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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

High alkaline conditions.

10.5 INCOMPATIBILE MATERIALS

Strong oxidizers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact.

LC₅₀ (rat): No data available LD₅₀ Oral (male rat): >5,000 mg/kg

LD₅₀ Dermal (rabbit): >2,000 mg/kg Acute Toxicity Estimates: No data available Skin Irritation (rabbit): Moderate irritant. Eye Irritation (rabbit): Not an irritant

Specific Target Organ Toxicity: Single exposure: No data available.

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

12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

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

	Species	Test Results	
Product			
96-hour LC ₅₀	Oncorhynchus mykiss	17.6 mg/L	
96-hr NOEC	Oncorhynchus mykiss	12.5 mg/L	
48-hour EC ₅₀	Daphnia Magna	9.3 mg/L	
48-hour NOEC	Daphnia Magna	7.5 mg/L	

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: No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

SAFETY DATA SHEET

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REVIEWED BY: Environmental Health and Safety

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at http://www.acrecycle.org/. 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: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS 60)

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA HMIS NFPA & HMIS Hazard Ratings:

> Health 0 Least Health Flammability Slight Flammability 1 0 Moderate 0 Reactivity Instability 3 В PPE High

Severe

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: **Immediate** Fire Sudden Release of Pressure Ν Delayed Reactive

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 applicable

16. OTHER INFORMATION

SDS STATUS: Format revised; all sections reviewed. PREPARED BY: Registrations and Regulatory Affairs

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