

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

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 **PRODUCT IDENTIFIER:** CA REGISTRATION NO. 34704-50063; WA REGISTRATION NO. 34704-08004
TRADE NAME: VADER® WITH LECI-TECH®
- 1.2 **RECOMMENDED USE:** PENETRANT – ACIDIFIER – DEPOSITION AID
- 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 - **Product Information:** 1-888-574-2878 (LPI-CUST)
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Eye Damage/Irritation	Category 1	H318
Skin Corrosion/Irritation	Category 2	H315
Acute Toxicity – Inhalation	Category 4	H332

2.2 Label elements



- Signal word: DANGER
- Hazard Statements: H318 – Causes serious eye damage.
H303 – May be harmful if swallowed.
H313 – May be harmful in contact with skin.
H315 – Causes skin irritation.
H332 – Harmful if inhaled.
- Precautionary Statements: (Prevention): P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P264 – Wash hands thoroughly after handling.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 – Use only outdoors or in a well-ventilated area.
- Precautionary Statement: (Response): P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 – Immediately call a poison center/doctor/physician.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P321 – Specific treatment (see First Aid on the product label).
P332+P313 – If skin irritation occurs: Get medical advice/attention.
P362 – Take off contaminated clothing and wash it before reuse.
P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 – Call a poison center/doctor/physician if you feel unwell.
- Precautionary Statement: (Storage): Not required.
- Precautionary Statement: (Disposal): Not required.



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2.3 Other hazards
None known

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Chemical Name:	CAS No.	Concentration [%]
Phosphatidylcholine	97281-47-5	
Methylated vegetable oil	67784-80-9	
Alcohol ethoxylate	34398-01-1	
Water	7732-18-5	90.00 10.00

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: 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.

If swallowed: 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 center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: 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

Symptoms: Causes serious eye damage.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTES TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use water fog, alcohol foam, dry chemical, or carbon dioxide extinguishing media.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Formation of toxic gases is possible in case of fire.

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 alcohol-type or universal-type foam on larger fires. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.



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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors, fumes, and spray mist and prolonged or repeated 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.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Avoid inhalation of vapors / spray mist or fumes and contact with eyes, skin and clothing. Do not breathe mist 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. Eye wash and safety shower on site are recommended.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Suggested storage above 40 °F. If frozen, warm product before use. 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

**8.1 CONTROL PARAMETERS:
OCCUPATIONAL EXPOSURE LIMITS**

ACGIH TLVs TWA

Components	Type	Value
No listings	TWA	

OSHA PELs TWA

No listings	TWA	
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Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No data		

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: Chemical goggles or face shield are recommended.
Skin Protection: Wear protective clothing. Wear protective gloves.
Respiratory Protection: In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear respiratory protection during operations where spraying or misting occurs. Wear air supplied respiratory protection. In the U.S.A., 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.



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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE:	Liquid
ODOR:	Aromatic, banana-like.
ODOR THRESHOLD:	Not determined.
COLOR:	Golden brown.
pH:	3.2 (1% solution).
MELTING POINT / FREEZING POINT:	No data available
BOILING POINT:	No data available
FLASH POINT:	>100 °C (>212 °F)
FLAMMABILITY (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:	115.5 centistokes @ 68 °F (20 °C)
SPECIFIC GRAVITY (Water = 1):	1.019 g/ml
DENSITY:	8.50 lbs/gal. / 1.02 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.

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 conditions. Will not polymerize.

10.4 CONDITIONS TO AVOID

High alkaline conditions.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact, inhalation.

LC₅₀ (rat): >2.12 mg/L (4 HR).

LD₅₀ Oral (female rat): >2,000 mg/kg

LD₅₀ Dermal (rat): >2,000 mg/kg

Skin Irritation (rabbit): Causes skin irritation.

Eye Irritation (rabbit): Causes serious eye damage.

Specific Target Organ Toxicity: 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



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12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

Ecotoxicological Data

	Species	Test Results
Vader	Rainbow trout	34% of 100 mg/L WAF* - 96- hour LC ₅₀ 13% of 100 mg/L WAF* - NOEC
	Daphnia magna	28% of 100 mg/L WAF* - 48-hour EC ₅₀ 13% of 100 mg/L WAF* - NOEC

*Water Accommodated Fraction.

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.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Do not contaminate water, food or feed by storage or disposal. 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 container in 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 www.acrecycle.org.

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 Hazard Ratings:

NFPA

1	Health	0	Least
0	Flammability	1	Slight
0	Instability	2	Moderate
		3	High
		4	Severe

HMIS

1	Health
0	Flammability
0	Reactivity
B	PPE



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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 INFORMATION

SDS STATUS: Section 2 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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