

SAFETY DATA SHEET

SDS NUMBER: 1000002545-14-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 06/06/14

AQUFACT™
SUPERSEDES: NEW

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:

TRADE NAME: AQUIFACT™

1.2 RECOMMENDED USE:

 DEPOSITION AGENT – 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

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not classified

2.2 Label elements



Further information: CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT IRRITATION. BIRTH DEFECTS HAZARD – CONTAINS MATERIAL WHICH CAN CAUSE BIRTH DEFECTS.

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN –

Appearance and odor: Liquid with Amine-like odor.

WARNING – CAUSES EYE AND SKIN IRRITATION – MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR SWALLOWED

Potential Health effects

Routes of exposure Eye contact, skin contact, inhalation.**Eyes** Causes moderate eye irritation.**Skin** May be irritating to skin.**Inhalation** Not expected to be irritating to respiratory system.**Ingestion** Not expected to be irritating to mouth, throat, and stomach.**Target organs** Skin. Eyes. Inhalation.**Signs and symptoms** Causes irritation to the eyes and skin. May cause irritation to the gastrointestinal tract, and respiratory system.**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.

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name:	CAS No.	Classification	Concentration [%]
Amines, tallow alkyl, ethoxylated	61791-26-2		30 - 60
Isotridecylalcohol, ethoxylated	78330-21-9		13 - 30
Ethylene glycol	107-21-1		0.1 - 1

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.**Eye contact:** 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.**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 center 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.

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4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms : Risk of moderate eye irritation. May cause skin irritation.

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

Take container, label or product name with you when seeking medical attention.

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 extinguishing media suitable to surrounding fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, irritating, corrosive and/or toxic gases may be produced.

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.

6. 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.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling : Avoid inhalation of vapors / spray 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.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Suggested storage above 32°F (0°C). Store in a cool, dry place. Store in original container. Do not reuse empty container. Do not contaminate water, food or feed by storage or disposal.

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OCCUPATIONAL EXPOSURE LIMITS****ACGIH TLVs TW**

Components	Type	Value
Ethylene glycol	STEL/CEIL(C)	C 100 mg/m ³ (Aerosol only)

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 are recommended.

Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove contaminants. The use of neoprene gloves is recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE :	Liquid
ODOR:	Amine-like.
ODOR THRESHOLD:	0.1 ppm.
COLOR :	Not available.
pH :	7.5 – 9.5.
MELTING POINT / FREEZING POINT:	-25°C / -13°F
BOILING POINT:	No data available
FLASH POINT:	>100°C / >212°F
FLAMMABILITY (solid, gas):	Does not support combustion at 187°F.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	No data available
VAPOR PRESSURE:	No data available.
SOLUBILITY:	Soluble
PARTITION CO-EFFICIENT, n-OCTANOL / WATER :	No data available.
AUTO-IGNITION TEMPERATURE:	No data available.
DECOMPOSITION TEMPERATURE:	Not determined
VISCOSITY :	0.61 cm ² /s / 61 cSt @ 40°C
SPECIFIC GRAVITY (Water = 1):	1.0 g/ml
BULK DENSITY:	8.35 lbs/gal. / 1.0 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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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

None known.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition or combustion may include and are not limited to: oxides of carbon, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION**11.1 LIKELY ROUTES OF EXPOSURE**

Eye contact, skin contact.

LC₅₀ (rat): No data available**LD₅₀ Oral (rat):** 1,200 mg/kg (Amines, tallow alkyl, ethoxylated)**LD₅₀ Dermal (rabbit):** >1,260 mg/kg (Amines, tallow alkyl, ethoxylated)**LD₅₀ Oral (rat):** 1,700 mg/kg to 2,100 mg/kg (Isotridecylalcohol, ethoxylated)**LD₅₀ Dermal (rat):** >2,000 mg/kg (Isotridecylalcohol, ethoxylated)**LD₅₀ Oral (rat):** 7,712 mg/kg (Ethylene glycol)**LD₅₀ Dermal (mouse):** >3,500 mg/kg (Ethylene glycol)**Skin Irritation (rabbit):** Slight irritant (Isotridecylalcohol, ethoxylated)**Eye Irritation (rabbit):** Severe irritant (Isotridecylalcohol, ethoxylated)**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 very toxic to aquatic organisms and may cause long-term effects in the aquatic environment. Water polluting material. May be harmful to the environment if released in large quantities.

Ecotoxicological Data

Components	Species	Test Results
Amines, tallow alkyl, ethoxylated (CAS: 61791-26-2)		
Aquatic		
Crustacea	EC ₅₀	Daphnia
Fish	LC ₅₀	5.2 mg/l, 48 hours
Crustacea	NOEC (Chronic)	0.68 to 7.4 mg/l, 96 hours
Isotridecylalcohol, ethoxylated (CAS: 78330-21-9)		
Bacteria	EC ₅₀	20 to 66 mg/l
Crustacea	EC ₅₀	>10 g/l, 3 hours
Algae	ErC ₅₀	2.5 mg/l, 48 hours Static
Fish	LC ₅₀	8.2 mg/l, 72 hours Static
		1.5 – 5.8 mg/l, 96 hours Semi-static

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: Amines, tallow alkyl, ethoxylated (CAS: 61791-26-2) – 28 days: <60% - Not readily biodegradable
 Isotridecylalcohol, ethoxylated (CAS: 78330-21-9) – 28 days: >60% - Readily biodegradable
 Ethylene glycol (CAS: 107-21-1): Readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL**Bioaccumulation:** Isotridecylalcohol, ethoxylated – LogP_{OW}: 5.07 – BCF: <500 – Potential: High**12.4 MOBILITY IN SOIL**

This product is water soluble and may disperse in soil.

12.5 OTHER ADVERSE EFFECTS**Assessment:** No data available.

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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.acrcycle.org.

14. TRANSPORT INFORMATION**14.1 LAND TRANSPORT**

DOT Shipping Description: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TALLOW AMINE, ETHOXYLATED), 9, III, MARINE POLLUTANT, ERG GUIDE 171

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

HMIS

1 Health
1 Flammability
0 Reactivity
X PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Ethylene glycol (CAS: 107-21-1) 5000 lbs.; Ethylene oxide (CAS: 75-21-8) 10 lbs.

SARA, Title III, Section 313: Ethylene glycol (CAS: 107-21-1); Ethylene oxide (CAS: 75-21-8)

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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