LINAMINE LO-N

1. Identification

Product Identifier:	**Linamine LO-N**	Other Identifiers:	None
Recommended use:	Emollient, foam agent, thickener		
Supplier:	Lincoln Fine Ingredients, a Maroon Group LLC 50 Industrial Circle Lincoln, RI 02865	Telephone:	401-722-2410
		Emergency Phone:	CHEMTREC 1-800-424-9300

2. Hazards Identification

WHMIS Classification (Hazardous Product Regulations – Canada SOR/2015-17)
OSHA Classification (Hazard Communication Rule – USA 29CFR1910:1200)

Eye Irritation - Category 2A,
Skin Irritation - Category 2
Acute Toxic - Category 4
Hazardous to the Aquatic Environment
(Acute) Category 1

WARNING: Causes serious eye irritation and skin irritation.
Harmful if swallowed
Very toxic to aquatic life

Prevention
Wear chemical safety glasses/goggles and gloves when handling this product. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists get medical attention

IF ON SKIN: Wash with plenty of water. If skin irritation occurs get medical attention. Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Call a doctor if you feel unwell.

Collect spillage

2. Hazards Identification (cont'd)

Disposal
Dispose of container or contents in accordance with local and provincial or other applicable regulations.

3. Composition & Information on Ingredients

Component	CAS #	%
Amines, C10-C16-alkyldimethyl, N-oxides	70592-80-2	29 – 31
Water	7732-18-5	69 – 71
Hydrogen peroxide	7722-84-1	<1

4. First Aid Measures

Eyes Immediately flush eyes with plenty of water for at least 15 minutes. Holdeyelids open to ensure adequate flushing. Remove contact lenses if present and easy to do. Continue flushing. Get medical attention.

Skin Flush with plenty of water. Obtain medical attention if irritation develops. Remove contaminated clothing, and wash separately before reuse.

Inhalation: If respiratory irritation develops remove to fresh air. If difficulty breathing, give oxygen and get medical attention. If not breathing apply artificial respiration and get medical attention.

Ingestion: Do NOT induce vomiting. Do not give anything to an unconscious person. If conscious wash mouth out and then give 1 – 2 glasses of water to drink Get medical aid. Vomiting may occur spontaneously – lay victim on side to avoid aspiration of swallowed product.

5. Fire Fighting Measures

Extinguishing Media: Does not burn. Use media suitable for surrounding fire, such as water spray, dry chemical, foam.
Do not use water jet as this will spread the fire.

Hazards arising from chemical: May generate nitrogen oxides, ammonia gas. Keep run-off out of rivers and streams.

Protection of Firefighters: Wear self-contained breathing apparatus (SCBA) and full protective clothing. Keep unopened containers cool with water spray. Closed containers may explode when exposed to high temperatures.

6. Accidental Release Measures

Personal Precautions: Avoid contact with spilled material. Wear chemical safety goggles and face-shield, chemical resistant gloves and protective clothing and footwear. Isolate spill area. Keep unnecessary people away. Approach spill from upwind. Ventilate enclosed spaces and monitor oxygen levels.

Environmental Precautions Prevent further leakage if safe to do so. Keep material out of drains, water courses and confined areas.

Spill clean-up: Absorb small spills with inert material. Dike and contain large spills for disposal.

7. Handling and Storage

Handling: Avoid contact. Keep container closed when not in use. Wash hands after handling. Do not eat, drink or smoke in work areas.

Storage: Store in a cool dry area. Keep away from flames and sparks. Store away from strong oxidizers.

8. Exposure Controls/Personal Protection

Exposure Limits: None established

Engineering Controls: Use general ventilation. Local exhaust suggested for enclosed spaces.

Emergency shower and eyewash stations should be readily accessible in the work area.

Personal Protective Equipment:

Eye/Face: Wear safety glasses and face-shield or chemical splash goggles.

Skin: Wear chemical resistant gloves.

Respiratory: Under normal conditions respiratory protection is not likely to be required. A disposable mask can be used to reduce nuisance mists.. If a respirator is used it should be properly fit-tested before use. SCBA must be used in oxygen deficient atmospheres.

9. Physical & Chemical Properties

Appearance:	Clear colorless liquid
Odor:	Mild
Odor Threshold:	Not Available
pH:	8
Melting/Freezing Point:	0 ºC
(Initial) Boiling Point (& range)	100 ºC
Flash Point:	Not applicable
Evaporation Rate:	Not available
Flammability:	Does not burn
Upper/Lower Flammability Limits:	Not applicable
Vapor Pressure:	Not available
Vapor Density:	Not available
Specific Gravity:	0.97
Solubility (in water):	Soluble
Partition Coefficient (Octanol/water):	Log K_{ow} <2.7
Auto ignition Temperature:	Not applicable
Decomposition Temperature:	Not available
Viscosity:	Not available

10. Stability and Reactivity

Reactivity	No data
Stability:	Stable under normal storage and handling conditions.
Conditions to Avoid:	Contamination, heat, flames
Hazardous Reactions:	None known
Incompatible Materials:	Strong oxidizing agents
Hazardous Decomposition Products:	Oxides of nitrogen and carbon, ammonia

11. Toxicological Information

Acute Toxicity

Amines, C10-C16-alkyldimethyl, N-oxides LD_{50} >600mg/kg (oral, rat)

LD_{50} >520mg/kg (dermal, rabbit)

Skin irritation	moderate irritant
Eye irritation	severe irritant

Chronic Toxicity

This product does not contain any ingredients listed as probable or suspected carcinogens by IARC, ACGIH, NTP or OSHA.

No evidence found of mutagenicity or reproductive toxicity.

No evidence was found of respiratory or skin sensitization

12. Ecological Information

Ecotoxicity

Toxic to aquatic life

Acute toxicity :	LC_{50} :1010 µg/l/96hr, Daphnia magna
	LC_{50} :2.6-3.5 mg/l/96hr, fish
Chronic toxicity:	Daphnia 21 day NOEC: 700 µg/l
	Fish (fathead minnow) 302 day NOEC: 420µg/l

Persistence and Degradability

This product has been tested and found to be readily biodegradable both aerobically and anaerobically

Bioaccumulative potential

Bioaccumulation potential is predicted to be low based on biodegradability and low partition coefficient

Mobility in soil	No data

13. Disposal Considerations

Dispose of in accordance with applicable municipal, provincial, state or national regulations.

14. Transportation Information

TDG

UN3082 Environmentally Hazardous Substance, Liquid NOS (Amine Oxide) Class 9 PG III

TDGR 1.45.1 Exempt by road and rail for transport on land

US DOT

Not regulated

ICAO/IATA

UN3082 Environmentally Hazardous Substance, Liquid NOS (Amine Oxide) Class 9 PG III

IMDG

UN3082 Environmentally Hazardous Substance, Liquid NOS (Amine Oxide) Class 9 PG III

Marine pollutant

15. Regulatory Information

Inventory Status

Australia	Australia Inventory of Chemical Substances	Yes
Canada	Domestic Substances List	Yes
Canada	Non-Domestic Substances List	No
Europe	European Inventory of New and Existing Chemicals	Yes
Europe	European List of Notified Chemical Substances	No
New Zealand	New Zealand Inventory	Yes
United States	Toxic Substances Control Act Inventory	Yes

US CERCLA RQ

None

16. Other Information

HMIS ratings	Health	2
	Flammability	0
	Physical Hazard	0
	Personal Protection	D

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