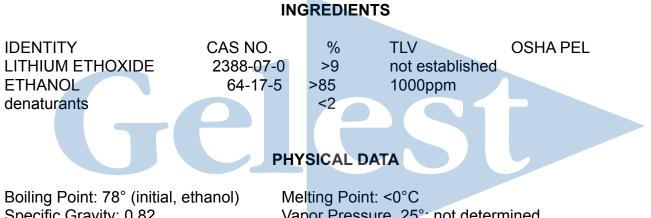
# GELEST, INC.

11 East Steel Rd. Morrisville, PA 19067 Phone: (215) 547-1015

MATERIAL SAFETY DATA SHEET EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **LITHIUM ETHOXIDE 9-10% in ETHANOL - AKL458** CHEMICAL NAME: LITHIUM ETHOXIDE 9-10% in ETHANOL SYNONYMS: LITHIUM ETHYLATE; ETHANOL, LITHIUM SALT CHEMICAL FAMILY: METAL ALCOHOLATE FORMULA: C<sub>2</sub>H<sub>5</sub>OLi HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1



Boiling Point: 78° (initial, ethanol) Specific Gravity: 0.82 Vapor Density (air =1): 1.59 (ethanol) % volatiles: 75 Molecular Weight: 68.05 Appearance & Color: Clear solution

Melting Point: <0°C Vapor Pressure, 25°: not determined Solubility in water: reacts, then dissolves Evaporation rate: N/A Other: N/A

# **FIRE & EXPLOSION DATA**

Flash Point, COC: 12°C (54°F) Autoignition Temp. not determined Flammability Limits-ethanol LEL: 3.3% UEL: 19%

Extinguishing Media: Dry chemical extinguisher, dry soda ash.

Special Fire Fighting Procedures: Protect against caustic vapors, smoke and water. Wear pressure demand self-contained breathing apparatus with full facepiece and full protective clothing.

Unusual Fire and Explosion Hazards: Irritating fumes and caustic vapors may develop when material is exposed to elevated temperatures or open flame.

Abbreviations: ND: Not Determined, No Data; NA: Not Appile (AKL458) hal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemcial Abstract Service Registration Number Gelest, Inc. © 2008

### **ENVIRONMENTAL INFORMATION**

Spill response: Ventilate area. Eliminate ignition sources. Absorb material into oil absorbent type clay, scoop into a dry metal container and cover loosely. Take to a chemical disposal area, then flush with a copious amount of water, collecting all caustic wastewater for proper disposal.

Recommended disposal: Treat quantities of 500 grams or less by flooding with water. Water solution will be caustic. Follow all chemical pollution control regulations.

# HEALTH HAZARD DATA

Eye Contact: Will cause immediate or delayed severe caustic burns to the eyes.

Skin contact: Will cause irritation and burns. Worker will notice a slippery feeling on washing.

Inhalation: Inhalation will cause sneezing, irritation and burns.

Oral Toxicity: not determined Inhalation Toxicity: not determined Eye Irritation: not determined

#### SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes, holding eyes open. Get medical attention.

SKIN: Immediately flush with water for at least fifteen minutes.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Give a demulscent such as milk, olive oil, or margarine in small amounts, up to two or three tablespoons.

# **REACTIVITY DATA**

Stability: Stable under nitrogen or argon in sealed containers.

Conditions to avoid: Material decomposes slowly in contact with moist air and rapidly in contact with water. Avoid contact with moist air, water, acids, alcohols, ketones, esters, carbon dioxide, halogens.

Hazardous decomposition products: Lithium hydroxide, ethanol and caustic organic vapors.

### -2-(AKL458)

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#### SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, a NIOSH approved caustic organic vaportype respirator should be worn.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses. Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. Long-sleeved fireresistant lab uniform or coverall is recommended. An eyewash and emergency shower should be available. Launder clothing before reuse.

### OTHER PRECAUTIONS

For research use only.

Storage and Handling: Store under dry nitrogen or argon in sealed containers.

T	RAN	SPORTATION
DOT SHIPPING NAME:FLAMMABLE DOT HAZARD CLASS: 3 DOT LABELS: FLAMMABLE LIQUID	(CC SUI	DNTAINS ETHANOL) B: 8
DOT ID No: UN2924	PG	
Prepared by safety and environmenta	al affa	irs ISSUE DATE AKL458: 1/9/03 SUPERSEDES: 4/21/98

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore.

# -3-(AKL458)

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