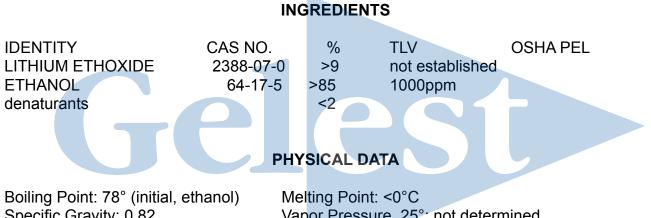
# GELEST, INC.

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

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# -3-(AKL458)

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