

# GELEST, INC.

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **LITHIUM METHOXIDE - AKL460**

CHEMICAL NAME: LITHIUM METHOXIDE

SYNONYMS: LITHIUM METHYLATE; METHANOL, LITHIUM SALT

CHEMICAL FAMILY: METAL ALCOHOLATE

FORMULA: CH<sub>3</sub>OLi

HMIS CODES HEALTH: 3 FLAMMABILITY: 3 REACTIVITY: 3

## INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
LITHIUM METHOXIDE	865-34-9	>95%	not established	
METHANOL	67-56-1	>5%	200ppm - skin	

## PHYSICAL DATA

Boiling Point: N/A  
Specific Gravity: 1.26  
Vapor Density (air =1): NA  
Molecular Weight: 37.97  
Appearance & Color: White powder

Melting Point: >500°C-decomposes  
Vapor Pressure: not determined  
Solubility in water: reacts, then dissolves  
Bulk Density: 0.3-0.35 kg/l

## FIRE & EXPLOSION DATA

Flash Point, COC: NA Autoignition Temp. not determined  
Flammability Limits-methanol LEL: NA UEL: NA

Extinguishing Media: Fires should be extinguished with dry sand, starting from the edge and working inwards. In no case should water be used.

Special Fire Fighting Procedures: Protect against caustic dust, 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 develop when material is exposed to elevated temperatures or open flame.

-1-(AKL460)

## ENVIRONMENTAL INFORMATION

Spill response: Ventilate area. Eliminate ignition sources. Mix material with 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 100 grams or less by flooding with water in a well-ventilated area free from flammable materials. Water solution will be caustic. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: Lithium methoxide will cause immediate or delayed severe caustic burns to the eyes.

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

Inhalation: Inhalation will cause sneezing, irritation and burns.

Oral Toxicity: 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 demulcent 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, methanol and caustic organic vapors.

-2-(AKL460)

## **SPECIAL PROTECTION INFORMATION**

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, a NIOSH approved Caustic organic vapor-type 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 fire-resistant lab uniform or coverall is recommended. An eyewash and emergency shower should be available. Launder clothing before reuse.

## **OTHER PRECAUTIONS**

For research and industrial use only.

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

## **TRANSPORTATION**

DOT SHIPPING NAME: FLAMMABLE SOLIDS, CORROSIVE, N.O.S. (LITHIUM METHOXIDE)

DOT HAZARD CLASS: FLAMMABLE SOLID

DOT LABELS: FLAMMABLE SOLID, CORROSIVE

DOT ID No: UN 2925 PG: II

Prepared by safety and environmental affairs

ISSUE DATE AKL460: 1/13/03

SUPERSEDES: 1/27/95

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