

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 ON LABEL: **LITHIUM METHOXIDE 10% in METHANOL-AKL461**

CHEMICAL NAME: LITHIUM METHOXIDE 10% in METHANOL

SYNONYMS: LITHIUM METHYLATE; METHANOL, LITHIUM SALT

CHEMICAL FAMILY: METAL ALCOHOLATE

FORMULA: CH₃OLi

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
LITHIUM METHOXIDE	865-34-9	>10%	not established	
METHANOL	67-56-1	>85%	200ppm - skin	

PHYSICAL DATA

Boiling Point: 68° (initial, methanol)
Specific Gravity: 0.795
Vapor Density, air =1: 5.9
% volatiles: >85
Molecular Weight: 37.97
Appearance & Color: Clear solution

Melting Point: NA
Vapor Pressure, 25°: 50mm
Solubility in water: reacts, then dissolves
Evaporation rate: NA
Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: 12°C (54°F) Autoignition Temp. not determined
Flammability Limits-methanol LEL: 6.0% UEL: 36.5%

Extinguishing Media: Dry chemical extinguisher, dry soda ash.

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 may develop when material is exposed to elevated temperatures or open flame.

-1-(AKL461)

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: Lithium methoxide 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, methanol and caustic organic vapors.

-2-(AKL461)

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 LIQUID, CORROSIVE, N.O.S.
(LITHIUM METHOXIDE SOLUTION)

DOT HAZARD CLASS: 3

DOT LABELS: FLAMMABLE LIQUID & CORROSIVE

DOT ID No: UN 2924

PG: II

Prepared by safety and environmental affairs

ISSUE DATE AKL461: 1/9/03

SUPERSEDES: 1/29/02

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