

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME ON LABEL: **ALANE-DIMETHYLETHYLAMINE COMPLEX - OMAL005**  
CHEMICAL NAME: ALANE-DIMETHYLETHYLAMINE COMPLEX  
SYNONYMS: (N,N-DIMETHYLETHANAMINE)TRIHYDROALUMINUM; DMEAA  
CHEMICAL FAMILY: METAL HYDRIDE  
FORMULA: C<sub>4</sub>H<sub>11</sub>AlN  
HMIS CODES HEALTH: 4 FLAMMABILITY: 4 REACTIVITY: 2

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV	OSHA PEL
ALANE-DIMETHYLETHYLAMINE COMPLEX	124330-23-0	>95	not established	(PEL and TLV for aluminum alkyls as Al: 2mg/m <sup>3</sup> )

**PHYSICAL DATA**

Boiling Point: 50-5°C @ 0.5MM	Melting Point: 5-11°C
Specific Gravity: 0.78	Vapor Pressure: <1mm
Vapor Density (air =1): >1	Solubility in water: reacts violently
% volatiles: NA	Evaporation rate: NA
Molecular Weight: 103.12	Other: NA
Appearance & Color: Clear liquid, fumes in air with irritating amine (fishy) odor	

**FIRE & EXPLOSION DATA**

Flash Point, COC: -20°C (-4°F)      Autoignition Temp.: <100°C  
Flammability Limits: not determined

Extinguishing Media: Dry chemical powder followed by sand or dolomite  
Special Fire Fighting Procedures: Mildly self-heating- may ignite on contact with combustible materials. Avoid eye and skin contact. Do not breathe fumes or inhale vapors.  
Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

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## ENVIRONMENTAL INFORMATION

Spill response: Cover with dry chemical extinguishing powder, lime, sand or soda ash. Do not use water. Remove sources of ignition. Remove combustible materials in the vicinity of the spill. Allow time for decomposition or fire to burn out, then sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Incinerate. Follow all chemical pollution control regulations. This is a RCRA hazardous waste: 40 CFR 261.21 (i.e. ignitable) 40 CFR 261.23 (1.e. reactive)

## HEALTH HAZARD DATA

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

Skin contact: Will cause irritation and burns.

Inhalation: Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.

Oral Toxicity: Not determined

Chronic Toxicity: There are no known chronic effects related to this compound.

## SUGGESTED FIRST AID

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

SKIN: Flush with water, then wash with soap and water.

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. To conscious individual give one full cup of water to dilute ingested material. Get medical attention.

## REACTIVITY DATA

Stability: Stable When stored <5°C in sealed containers under dry inert atmosphere. The product can generate small amounts of hydrogen when exposed to alkalis and protic materials such as water and alcohol.

Conditions to avoid: May ignite on contact with combustible materials in air. Store away from alkalis, oxidizers, metal salts, precious metals, chlorine, bromine.

Hazardous decomposition products: Hydrogen, formaldehyde, carbon monoxide, organic acid vapors and aluminum oxides.

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## SPECIAL PROTECTION INFORMATION

Ventilation: Glove box or sealed system under inert atmosphere is required. Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor respirator.

Eye and Face Protection: Full face shield with chemical workers goggles.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

## OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

Store <5°C.

Flammable and combustible materials should not be stored in or near working areas.

## TRANSPORTATION

DOT SHIPPING NAME: PYROPHORIC LIQUID, ORGANIC, N.O.S.  
(ALANE-DIMETHYLETHYLAMINE COMPLEX)

DOT HAZARD CLASS: 4.2

DOT LABEL: Spontaneously Combustible

DOT ID No: UN2845 PG: I

IDMG Code: 4254

Air transport and UPS forbidden.

Prepared by safety and environmental affairs      MSDS ISSUE DATE: OMAL005: 9/16/15  
SUPERSEDES: 9/23/05

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