

## GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME ON LABEL: ALANE-DIMETHYLETHYLAMINE COMPLEX 0.5M in toluene - OMAL006

CHEMICAL NAME: ALANE-DIMETHYLETHYLAMINE COMPLEX 0.5M in toluene SYNONYMS: (N,N-DIMETHYLETHANAMINE)TRIHYDROALUMINUM in toluene

CHEMICAL FAMILY: METAL HYDRIDE

FORMULA: C<sub>4</sub>H<sub>11</sub>AIN

HMIS CODES HEALTH: 4 FLAMMABILITY: 4 REACTIVITY: 2

**INGREDIENTS** 

IDENTITY CAS NO. % TLV OSHA PEL

ALANE-DIMETHYLETHYLAMINE COMPLEX124330-23-0 10-14 not established

(PEL and TLV for aluminum alkyls as AI: 2mg/m³)
TOLUENE 108-88-3 86-90 100ppm 150ppm

PHYSICAL DATA

Boiling Point: 111° (initial, toluene) Melting Point: 11°C (neat)

Specific Gravity: 0.837 Vapor Pressure: 2mm

Vapor Density (air =1): >1 Solubility in water: reacts violently

% volatiles: NA Evaporation rate: NA

Molecular Weight: 103.12 Other: NA

Appearance & Color: Clear solution, fumes in air with fishy (amine) odor.

#### FIRE & EXPLOSION DATA

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

Flammability Limits: not determined

Extinguishing Media: Dry chemical powder followed by sand or dolomite

Special Fire Fighting Procedures: 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.

Abbreviations: ND: Not Determined, No Data; NA: Not Applicate (QMALQ06) bose, 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 Colors and 2008



#### **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. Vapor inhalation of toluene may lead to impairment of coordination mental alertness, and reaction times, leading to accident proneness. Exposure to levels around 500ppm leads to narcotic effects including nausea, headache and mental confusion.

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 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: Store away from alkalis, oxidizers, metal salts, precious metals, chlorine, bromine. Hazardous decomposition products: Hydrogen, formaldehyde, carbon monoxide, organic amine 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.

Laboratory and production areas must be equipped with special fire-extinguishing media for pyrophorics. Flammable and combustible materials should not be stored in or near working areas for pyrophorics.

## **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

Air transport and UPS forbidden.

Prepared by safety and environmental affairs ISSUE DATE: OMAL006: 6/17/05

SUPERSEDES: none

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