

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **TRIOCTYLALUMINUM, 25% in heptane- OMAL088**

CHEMICAL NAME: TRIOCTYLALUMINUM, 25% in heptane

SYNONYMS: ALUMINUM TRI-n-OCTYL; TNOA

CHEMICAL FAMILY: ALUMINUM COMPOUND

FORMULA: C<sub>24</sub>H<sub>51</sub>Al

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV	OSHA PEL
TRIOCTYLALUMINUM	1070-00-4	24-26	not established	not established
HEPTANE	142-82-5	74-76	400ppm	400ppm (STEL: 500ppm)

**PHYSICAL DATA**

Boiling Point: 120-5°C at 0.1mm (neat)	Melting Point: <-40°C
Specific Gravity: 0.71	Vapor Pressure: < 0.1mm (neat)
Vapor Density (air =1): >1	Solubility in water: reacts violently
% volatiles: NA	Evaporation rate: NA
Molecular Weight: 366.63	Other: NA
Appearance & Color: Clear liquid, fumes in air.	

**FIRE & EXPLOSION DATA**

Flash Point, COC: -2°C (28°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.

## 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.

Chronic Toxicity: not determined

## 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. Decomposes >240°C. 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 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 use only.

Storage and Handling: Store in sealed containers.

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

## TRANSPORTATION

DOT SHIPPING NAME: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. (TRIOCTYLALUMINUM)

DOT HAZARD CLASS: 4.3 SUB: 3

DOT LABEL: Dangerous when Wet, Flammable

DOT ID No: UN3399 PG: II

Prepared by safety and environmental affairs MSDS ISSUE DATE: OMAL088: 5/15/14  
SUPERSEDES: 8/26/11

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