

GELEST, INC.

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**MATERIAL SAFETY
DATA SHEET**

**EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300**

NAME USED ON LABEL: **ALUMINUM III t-BUTOXIDE - AKA030**

CHEMICAL NAME: ALUMINUM III t-BUTOXIDE

SYNONYMS: ALUMINUM TRI-tert-BUTOXIDE

CHEMICAL FAMILY: ALUMINUM ALCOHOLATE

FORMULA: $C_{12}H_{27}O_3Al$

HMIS CODES HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
ALUMINUM III t-BUTOXIDE	556-91-2	>95		not established

PHYSICAL DATA

Boiling Point: 156°/2mm

Specific Gravity: <1

Vapor Density (air=1): >1

% volatiles: >25

Molecular Weight: 246.32

Appearance & Color: White solid, slight odor.

Melting Point: (241-6°)

Vapor Pressure: not determined

Solubility in water: insoluble, reacts slowly

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: > 65°C (>150°F) Autoignition Temp.: not determined

Flammability Limits- LEL: NA UEL: NA

Aluminum t-butoxide is a combustible solid.

Extinguishing Media: Foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid water spray as t-butanol will be generated. 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.

-1-(AKA030)

ENVIRONMENTAL INFORMATION

Spill response: Utilize non-flammable absorbent, then sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: Will cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates may irritate the respiratory tract.

Oral Toxicity: not determined

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. Get medical attention.

REACTIVITY DATA

Stability: Stable

Conditions to avoid: Material decomposes slowly in contact with air by reaction with moisture, liberating t-butanol and aluminum hydroxide. Avoid contact with water.

Hazardous decomposition products: Organic acid vapors and aluminum oxide fumes.

-2-(AKA030)

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and mist respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

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. Do not allow vapors or dust to accumulate in work areas.

TRANSPORTATION

DOT SHIPPING NAME: COMBUSTIBLE SOLID, NOS

DOT HAZARD CLASS: not regulated

DOT LABEL: not required

DOT ID No: not required

Prepared by safety and environmental affairs AKA030 ISSUE DATE 9/12/02
SUPERSEDES: 7/28/94

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