

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 USED ON LABEL: **THALLIUM 2,4-PENTANEDIONATE AKT830**
CHEMICAL NAME: THALLIUM 2,4-PENTANEDIONATE
SYNONYMS: THALLOUS ACETYLACETONATE
CHEMICAL FAMILY: THALLIUM COMPOUND
FORMULA: C₅H₇O₂TI
HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
THALLIUM 2,4-PENTANEDIONATE	14219-90-0/25955-51-5	>95	not established	
		(0.1mg(TI)/m ³)		0.1mg(TI)/m ³

PHYSICAL DATA

Boiling Point: 100°C @ 10 ⁻⁵ mm - sub	Melting Point: >100°C
Specific Gravity: not determined	Vapor Pressure, 20°: <0.0001mm
Vapor Density (air =1): NA	Solubility in water: not determined
% volatiles: <1	Evaporation rate: NA
Molecular Weight: 303.50	Other: NA
Appearance & Color: white to off-white crystalline powder	

FIRE & EXPLOSION DATA

Flash Point, COC: >110°C (>230°F) Autoignition Temp.: not determined
Flammability Limits- LEL: NA UEL: NA

Leave area of fire unless equipped with a self-contained breathing apparatus.

Extinguishing Media: Foam, carbon dioxide, dry chemical.
Special Fire Fighting Procedures: Leave area of fire unless equipped with a self-contained breathing apparatus. Avoid eye and skin contact. Do not breathe fumes or inhale vapors.
Unusual Fire and Explosion Hazards: Toxic, irritating fumes and organic acid vapors will develop when material is exposed to elevated temperatures or open flame.

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ENVIRONMENTAL INFORMATION

Spill response: Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Acute poisoning may occur. Can be fatal. Possible effects include paralysis, joint pain, hair loss. At lower levels or onset of exposure swelling of the feet and legs, vomiting, angina-like pain, nephritis and mental confusion may occur.

Eye Contact: Causes immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis.

Inhalation: Inhalation may irritate the respiratory tract.

Oral Toxicity: Oral toxicity of thallium 2,4-pentanedionate has not been determined. Oral Toxicity, thallium in rats, LDLo: 50mg/kg.

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. 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. *(Note to physician: The following treatment for thallium metal poisoning has recommended by the International Technical Information Institute. The applicability to thallium ethoxide poisoning has not been determined. Treat swallowing by inducing vomiting, practice stomach wash with 1% sodium iodide solution, followed by saline catharsis and then provide laxative. Prescribe 10cc of 10% sodium thiosulfate solution intravenously three times daily.)*

REACTIVITY DATA

Stability: Stable

Conditions to avoid: Avoid contact with oxidizing agents.

Hazardous decomposition products: Organic acid vapors and thallium oxide.

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SPECIAL PROTECTION INFORMATION

Ventilation: Local, scrubbed exhaust must be provided. Mechanical is recommended.

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

Physical Examination: Physical examinations of exposed personnel should be conducted annually, with special attention to vision and weight, and including a complete blood count, urinalysis and studies of kidney and liver function.

OTHER PRECAUTIONS

For research use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: Thallium compounds, n.o.s.

DOT HAZARD CLASS: Poisonous (Toxic) Substance (Division 6.1)

DOT LABEL: POISON

DOT ID No: UN 1707

Prepared by safety and environmental affairs

ISSUE DATE AKT830: 2/12/08

SUPERSEDES: 3/6/03

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