

GELEST, INC. 11 East Steel Rd. Morrisville, PA 19067

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME ON LABEL: TANTALUM TETRAETHOXIDE DIMETHYLAMINOETHOXIDE - AKT817

CHEMICAL NAME: TANTALUM TETRAETHOXIDE DIMETHYLAMINOETHOXIDE

SYNONYMS:SODIUM

CHEMICAL FAMILY: TANTALUM COMPOUND

FORMULA: C₁₂H₃₀NO₅Ta

HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1

INGREDIENTS

IDENTITY CAS NO. % TLV OSHA PEL

TANTALUM TETRAETHOXIDE DIMETHYLAMINOETHOXIDE

172901-22-3 >95 not known tantalum= 5mg/m³

PHYSICAL DATA

Boiling Point: 125°C @ 1mm Melting Point: N/A

Specific Gravity: 1.5

Vapor Pressure: <0.01mm

Vapor Density, air = NA

Solubility in water: reacts

vapor Pressure: <0.01mm

Solubility in water: reacts

Evaporation rate: NA

Molecular Weight: 449.33 Other: NA

Appearance & Color: Straw to amber liquid

FIRE & EXPLOSION DATA

Flash Point, COC: >110°C (>230°F) Autoignition Temp.: not determined

Flammability Limits- NA

Extinguishing Media: Water spray or alcohol resistant foam, carbon dioxide, dry chemical. Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and caustic vapors may develop when material is exposed to elevated temperatures or open flame.



ENVIRONMENTAL INFORMATION

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

Recommended Disposal: Incinerate. 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. Material generates methanol on contact with water or moisture in skin, eyes and mucous membranes and has an irritating, dehydrating effect on overexposed tissue. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation may irritate the respiratory tract. Overexposure can cause lung damage - pulmonary toxin.

Note: The hydrolysis products are tantalum oxide, dimethylaminoethanol and ethanol. Tantalum oxide is reported to be moderately toxic (TOXICITY - oral rat, LD50: 8000mg/kg).

Oral Toxicity: oral-rat, LD50: not determined Inhalation Toxicity: ihl-rat, LDLo: 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.

REACTIVITY DATA

Stability: Stable

Conditions to avoid: Material decomposes slowly in contact with moist air or with water liberating ethanol. Avoid contact with oxidizing agents.

Hazardous decomposition products: Ethanol, dimethylaminoethanol, tantalum oxide.

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SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH certified comination organic vapor -

amine 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 use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI DOT HAZARD CLASS: NONE REQUIRED

DOT LABEL: NONE REQUIRED DOT ID No: NONE REQUIRED

Prepared by safety and environmental affairs

ISSUE DATE AKT817: 3/21/14 SUPERSEDES: 3/3/03

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