

# **GELEST, INC.**

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: TRIS(DIETHYLAMINO)(t-BUTYLIMINO)TANTALUM - OMTA082

CHEMICAL NAME: TRIS(DIETHYLAMINO)(t-BUTYLIMINO)TANTALUM

SYNONYMS: TANTALUM t-BUTYLINOTRIS(DIETHYLAMIDE) CHEMICAL FAMILY: ORGANOAMINOTANTALUM COMPOUND

FORMULA: C<sub>16</sub>H<sub>39</sub>N<sub>4</sub>Ta

HMIS CODES HEALTH: 3 FLAMMABILITY: 3 REACTIVITY: 1

## **INGREDIENTS**

IDENTITY CAS NO. % TLV OSHA PEL

TRIS(DIETHYLAMINO)(t-BUTYLIMINO)TANTALUM

69896-41-7 >95 not established not established (OSHA PEL for diethylamine, TWA: 25ppm)

## PHYSICAL DATA

Boiling Point: 94-6° at 0.5mm Freezing Point: <0°C Specific Gravity: 1.252 Vapor Pressure: <0.1mm Vapor Density (air=1): >1 Solubility in water: reacts % volatiles: NA Evaporation rate: NA

Molecular Weight: 468.46 Other: NA

Appearance & Color: Orange-amber liquid with acrid amine odor

#### **FIRE & EXPLOSION DATA**

Flash Point, COC: 46°C (115°F) Autoignition Temp.: 380°

Flammability Limits: not determined

Extinguishing Media: Water spray, 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 of diethylamine and organic acid vapors may develop when material is exposed to water or open flame.

## -1-(OMTA082)

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, 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 Gelest, Inc. © 2008



#### **ENVIRONMENTAL INFORMATION**

Spill response: May be hazardous to aquatic life if released to open waters. Cover spill with absorbent material. Transfer to a suitable container for disposal.

Recommended Disposal: Hydrolyze material by mixing with water in a hood. Aqueous layer contains diethylamine which should be neutralized with hydrochloric acid. Organic layer may be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material 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 which may be delayed several hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of vapors or particulates of will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Inhalation Toxicity: not determined 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. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

## **REACTIVITY DATA**

Stability: Stable in sealed containers stored under a dry inert atmosphere.

Conditions to avoid: Combustible; avoid contact with heat, sparks or open flame.

Incompatibility (materials to avoid): Reacts with water and moisture in air liberating dimethylamine. Avoid contact with alcohols, acids, oxidizers.

Hazardous decomposition products: Organic acid vapors, dimethylamine, tantalum dioxide.

-2-(OMTA082)



#### SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or combination organic vapor/amine gas

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: FLAMMABLE LIQUID, CORROSIVE, N.O.S.

(TRIS(DIETHYLAMINO)(t-BUTYLIMINO)TANTALUM)

DOT HAZARD CLASS: 3 SUB: 8

DOT LABEL: FLAMMABLE LIQUID & CORROSIVE

DOT ID No: UN2924 PG: II

Prepared by safety and environmental affairs MSDS ISSUE DATE OMTA082: 2/6/14 SUPERSEDES: 4/6/05

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