

# MATERIAL SAFETY DATA SHEET

Peace Modern Town C-2408, Dalian, 116023, China Tel: +86-411-84377919 Fax: +86-411-84511565 Web: <a href="https://www.sibond.com">www.sibond.com</a> E-mail: info@sibond.com

NAME USED ON LABEL: BIS(TRIETHOXYSILYLPROPYL)TETRASULFIDE CHEMICAL NAME: BIS(TRIETHOXYSILYLPROPYL)TETRASULFIDE SYNONYMS: BIS(TRIETHOXYSILYLPROPYL)TETRASULFANE; TESPT

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C<sub>18</sub>H<sub>42</sub>O<sub>6</sub>S<sub>4</sub>S<sub>i2</sub>

HMIS CODES HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 1

#### **INGREDIENTS**

**IDENTITY** 

BIS(TRIETHOXYSILYLPROPYL)TETRASULFIDE CAS NO . % TLV OSHA PEL 40372-72-3 95 not established

PHYSICAL DATA

Boiling Point: 250°C - decomposes

Specific Gravity: 1.095

Vapor Pressure, 25°: <1mm

Solubility in water: reacts

% volatiles: <5% Evaporation rate: not determined

Molecular Weight: 538.94 Other: NA

Appearance & Color:Pale yellow to amber liquid with sulfurous odor

# **FIRE & EXPLOSION DATA**

Flash Point, COC: 91°C (186°F) Autoignition Temp.: not determined

Flammability Limits: not determined

Extinguishing Media: Water spray or fog, 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 organic acid 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

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ethanol 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.

Note: The hydrolysis product of bis(triethoxysilylpropyl)tetrasulfide is ethanol.

Oral Toxicity - rat, LD50: 16,400 mg/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.

## **REACTIVITY DATA**

Stability: Stable in sealed containers.

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, organic acid vapors, sulfur dioxide and silicon dioxide.

Hazardous polymerization: Will not occur.

# **SPECIAL PROTECTION INFORMATION**

Ventilation: Local exhaust is required. 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.

#### **OTHER PRECAUTIONS**

For research and industrial use only.

Storage and Handling: Store in sealed containers.

Containers require grounding during use.

# **TRANSPORTATION**

DOT SHIPPING NAME: CHEMICALS NOI DOT HAZARD CLASS: None required

DOT LABEL: None required DOT ID No: None required

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