

# MATERIAL SAFETY DATA SHEET



Date Issued: 08/10/2010  
MSDS No: 2010.143

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT CODE:** B2495.7  
**PRODUCT FORMULATION NAME:** 1,6-Bis (trimethoxysilyl) hexane  
**MOLECULAR FORMULA:** C<sub>12</sub>H<sub>30</sub>O<sub>6</sub>Si<sub>2</sub>

### MANUFACTURER

UCT Specialties, Inc.  
2731 Bartram Road  
Bristol, PA 19007

**Emergency Contact:** Jon Telepchak  
**E-Mail:** jtelepchak@unitedchem.com  
**Product Stewardship:** 215-781-9255  
ex141  
**Service Number:** 717-247-0896

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CANUTEC (Canadian Transportation) :**(613) 996 - 6666  
**CHEMTREC (US Transportation) :**(800) 424 - 9300

**COMMENTS:** For Research and Development Use Only

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** liquid

### POTENTIAL HEALTH EFFECTS

**EYES:** Moderately irritating

**SKIN:** Moderately irritating

**INGESTION:** Harmful, Avoid contact. Ingestion of small amount may cause eye damage.

**INHALATION:** Causes irritation or damage to lung. Harmful, avoid contact.

Vapors may seriously injure nose, throat, and lungs

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**ACUTE TOXICITY:** Material generates Methanol (toxic on contact with water or moisture on the skin eyes and mucous membrane.

Methanol is a tissue irritant that may be absorbed through the skin produce systemic toxic effects. Vapors may be inhaled and metabolized to Formaldehyde and Formic acid resulting in systemic acidosis, blindness, and ultimately death from respiratory arrest. Liquid produces effect similar to inhalation overexposure when ingested

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS	EINECS
1,6-Bis (trimethoxysilyl) hexane		
Methanol	67-56-1	200-659-6

#### 4. FIRST AID MEASURES

**EYES:** Flush with clean water for at least 15 minutes and consult physician

!!!!Get Medical Attention Immediately!!!!

**SKIN:** Scrub with soap and water. Remove contaminated clothing and shoes

**INGESTION:** Get medical attention

**INHALATION:** Remove victim to fresh air, give CPR or oxygen if necessary

**COMMENTS:** If symptoms persist, get medical attention

Never give anything by mouth to an unconscious person

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** 95°C (203°F) (Closed cup)

**EXTINGUISHING MEDIA:** CO<sub>2</sub>, foam, dry chemical, water spray or fog

**FIRE FIGHTING EQUIPMENT:** Fire fighters must wear positive pressure, self contained breathing apparatus and full protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Absorb spilled material with suitable chemical binder. Shovel absorbent into suitable waste container. Do not contaminate soil, groundwater, or surface water.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear appropriate personal protective equipment as specified in section 8.

#### 7. HANDLING AND STORAGE

**HANDLING:** Do Not breathe vapors, provide adequate ventilation

**STORAGE:** Store in cool and dry place. Protect from moisture. Maintain tightly closed container. Store away from alkaline, acidic and oxidizing materials. Provide adequate ventilation

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Local exhaust ventilation may be necessary to control any fume levels during the use of this product.

##### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Use Chemical goggles.

**SKIN:** Use impervious gloves. Use impervious clothing as necessary to protect against skin contact

**RESPIRATORY:** Local exhaust required, Mechanical ventilation required

In case of exposure, use appropriate NOISH approved respiratory protection

**WORK HYGIENIC PRACTICES:** General industrial hygiene practice.

**OTHER USE PRECAUTIONS:** Equipment should be maintained as vapor tight as possible, and personal protective equipment should be worn whenever possibility of exposure to the vapors exists. Research and development activities should be conducted in a hood with adequate ventilation to prevent vapor exposure.

**COMMENTS:** To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29 CFR 1910.132) be conducted before using this product.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid  
**VAPOR DENSITY:** > 1  
**BOILING POINT:** 161°C /2mm  
**FLASH POINT AND METHOD:** 95°C (203°F) (Closed cup)  
**SOLUBILITY IN WATER:** Reacts  
**SPECIFIC GRAVITY:** 1.080

## 10. STABILITY AND REACTIVITY

**STABILITY:** (UNDER NORMAL CONDITIONS): Stable under ordinary conditions of use and storage.  
**POLYMERIZATION:** Hazardous polymerization will not occur  
**CONDITIONS TO AVOID:** Water and moist air  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Generates Mehtanol; TLV (skin TWA)200ppm  
**INCOMPATIBLE MATERIALS:** oxidizing agents, alkali and acid

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**NOTES:** \*Potential inhalation hazard.

Based on published data for a structurally analogous substance, this material may be harmful if inhaled. Exposure to vapors may cause respiratory distress, and damage to eyes, nose, throat and lungs.

### CARCINOGENICITY

**IARC:** No

**NTP:** No

**OSHA:** No

**COMMENTS:** No information available

Material generates Mehtanol on hydrolysis

Methanol: Toxicity Data: ihl-hmn TClO: 86,000 mg/m<sup>3</sup>; ihl-hum TClO: 300ppm; ih-rat LC50: 64,000 ppm / 4 hours; orl-hum LDLoL: 428 mg/kg; orl -hum LDLo: 143 mg/kg; orl-man TDLo: 3429 mg/kg; orl -wmn TDLo: 4000 mg/kg; orl -rat LD50: 5628 mg/kg; skn-rbt LD50: 15,800mg/kg; unk- man LDLo: 868 mg/kg

Irritation Data: eye-rbt 40 mg MOD iRR; skn- rbt 500mg / 25 hours MOD IRR

Methanol is the subject of a TSCA CHIP, a NIOSH Criteria Document, a NIOSH Current Intelligence Bulletin, is a CERCLA Hazardous Substance (RQ= 5000 # /2270kg is listed under RCRA (U154) , and is a SARA Tittle II Section 313 Toxic Chemical.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No information available

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Incineration is recommended . Treat or dispose of waste material in accordance with all local, state/provincial and national requirements.

**EMPTY CONTAINER:** Containers of this material may be hazardous when empty since they retain product residues(liquid); observe all warnings and precautions listed for this product.

## 14. TRANSPORT INFORMATION

**COMMENTS:** not regulated

## 15. REGULATORY INFORMATION

### UNITED STATES

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA STATUS:** Some of the products or components are listed on the TSCA inventory

## 16. OTHER INFORMATION

**APPROVED BY:** Office of Environmental Health Safety & Security      **TITLE:** Dir. of Env. Health Safety & Security

**PREPARED BY:** jnm

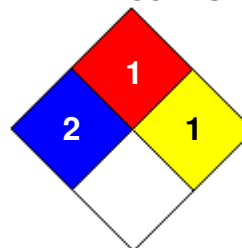
**INFORMATION CONTACT:** jtelepchak@unitedchem.com

**REVISION SUMMARY:** New MSDS

### HMIS RATING

<b>HEALTH:</b>	*	<b>2</b>
<b>FLAMMABILITY:</b>		<b>1</b>
<b>PHYSICAL HAZARD:</b>		<b>1</b>
<b>PERSONAL PROTECTION:</b>		

### NFPA CODES



**MANUFACTURER SUPPLEMENTAL NOTES:** All technical data is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

**MANUFACTURER DISCLAIMER:** The data in this Material Safety Data Sheet relates only to the specific material designated herein.

It does not relate to use in combination with any other material or in any process.

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS MATERIAL SAFETY DATA SHEET HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST OPINION ON THE SUBJECT AS OF THE DATE ON THIS SHEET. HOWEVER, NO WARRANTY, GUARANTEE OR REPRESENTATION, EXPRESS OR IMPLIED, IS MADE BY UCT, INC. AS TO THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION OR TO THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.