



## DATA SHEET

### SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: 1,2-Bis(Trimethoxysilyl)ethane  
Product Code: B16805

Supplier: Pfaltz & Bauer, Inc.  
172 E. Aurora Street  
Waterbury, CT 06708 USA

Phone: 203 574-0075  
Fax: 203 574-3181  
Emergency Phone: CHEMTREC, US: 1-800-424-9300  
CHEMTREC, International: 1-703-527-3887

### SECTION 2: COMPOSITION/INFORMATION on INGREDIENTS

Chemical Name: 1,2-Bis(Trimethoxysilyl)ethane  
Synonyms: 1,4-Disilabutane, 1,1,1,4,4,4,-hexamethoxy,  
1,2-Ethylenebis(trimethoxysilane),  
Hexamethoxydisilylethane, 3,3.6.6-Tetramethoxy-  
2,7-dioxa-3,6-disilaoctane

CAS Number: 18406-41-2  
MDL Number: MFCD00053672  
Beilstein Reg. Number: Not available  
Molecular Formula:  $[-CH_2Si(OCH_3)_3]_2$   
Molecular Weight: 270.43

### SECTION 3: HAZARDS IDENTIFICATION

Acute Health Hazard: Highly toxic by inhalation, ingestion or skin contact.  
Causes severe irritation.

Chronic Health Hazard: Not Available

HMIS Rating: H:4 F:1 R:1  
NFPA Rating: H:4 F:1 R:1

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

#### **SECTION 4: FIRST AID MEASURES**

<u>Eye Contact:</u>	Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
<u>Skin Contact:</u>	Wash skin with soap and water. If irritation persists, seek medical attention.
<u>Ingestion:</u>	Do not induce vomiting. Seek medical attention.
<u>Inhalation:</u>	Move to a fresh air environment. Contact a physician if breathing becomes difficult.

#### **SECTION 5: FIRE FIGHTING MEASURES**

<u>Flash Point:</u>	109°C closed cup
<u>Explosion Limits:</u>	Lower: Not available Upper: Not available
<u>Auto Ignition Temperature:</u>	Not available
<u>Extinguishing Media:</u>	Carbon dioxide, dry chemical powder or foam, water spray.
<u>Protective Equipment:</u>	Wear self-contained respirator and fully protective impervious suit.
<u>Specific Hazards:</u>	None

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

<u>Personal Protection:</u>	Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.
<u>Environmental Protection:</u>	Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

#### **SECTION 7: HANDLING and STORAGE**

<u>Handling:</u>	Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.
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Storage: Store in a tightly closed container in a dry, well-ventilated place. Protect from moisture.

Storage Temperature: 15 - 30°C

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eyes: Wear appropriate protective eyeglass or chemical safety goggles. Eyewash facility in vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

<u>Exposure Limits:</u>	<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
	USA	ACGIH	TWA	10 ppm
	USA	OSHA	PEL	Not available

### **SECTION 9: PHYSICAL and CHEMICAL PROPERTIES**

Appearance: Clear colorless liquid

Odor: Characteristic

Melting Point: Not available

Boiling Point: 103 - 104°C/5 mm Hg

Density: 1.073 g/cm<sup>3</sup>

Refractive Index, n<sup>20</sup><sub>D</sub>: 1.409

Viscosity: Not available

Solubility in Water: Reacts

### **SECTION 10: STABILITY and REACTIVITY**

Stability: Stable under recommended storage conditions.

Incompatibility: Strong oxidizing agents, alcohols, heavy metal salts, moisture.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

RTECS Number: JG7873000

Target Organs: Eyes, kidneys, liver, heart, nerves

Toxicity Data: Oral Rat LD<sub>50</sub>: 23 mg/kg

Inhalation Rat LC<sub>50</sub>: 2,400 ppb/4H

Intravenous Rat LD<sub>50</sub>: 226 mg/kg

### **SECTION 12: ECOLOGICAL INFORMATION**

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Mobility: Not available  
Bioaccumulation: Not available  
Ecotoxicity: Not available  
Aquatic toxicity: May cause long-term adverse effects in the aquatic environment.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

### **SECTION 14: TRANSPORT INFORMATION**

DOT Shipping Name: Toxic By Inhalation Liquid

DOT UN Number: 3382

DOT Hazard Class: 6.1

DOT Packing Group: I

Hazard Label: Poison Inhalation Hazard; Zone: B

IATA Shipping Name: Toxic By Inhalation Liquid

IATA UN Number: 3382

IATA Hazard Class: 6.1

IATA Packing Group: I

**Not Permitted For Air Transport**

### **SECTION 15: REGULATORY INFORMATION**

United States:

Toxic Substance Control Act (TSCA (8b)): Listed

Superfund Amendments and Reauthorization Act (SARA 302): Not available

Superfund Amendments and Reauthorization Act (SARA 313): Not available

International:

European Inventory of Existing Chemical Substances (EINECS): Listed (242-285-6)

Canadian Domestic Substances List (DSL): Listed

Canadian Non-Domestic Substances List (NDSL): Not listed

Australian Inventory of Chemical Substances (AICS): Not available

Japanese Handbook of Existing and New Chemical Substances (MITI): Not available

Chinese Inventory: Not available

Korean KECL: Not available

Philippines PICCS: Not available

Harmonized Tariff Number: 2931.00.9010

### **SECTION 16: OTHER INFORMATION**

Date Prepared: August 30, 2007