



## Material Safety Data Sheet

### HEXAMETHYLDISILAZANE (HMDS)

#### SECTION-1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hexamethyldisilazane

Synonym: Bis(trimethylsilyl)amine, HMDS, Hexamethyldisilazane

**Company Name**

Chemcon Speciality Chemicals Pvt. Ltd. Block No-355, Manjusar-Kunpad Road, Village-Manjusar, Taluka: Savli Distt. Vadodara-391 775 INDIA

**For information call:** 91 2667 264103/4/5

#### SECTION-2. COMPOSITION, INFORMATION ON INGREDIENTS

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>	NTP	IARC	OSHA regulated
1,1,1,3,3,3-Hexamethyldisilazane (999-97-3)	100	ND	ND	ND	ND	ND

#### SECTION-3. HAZARDS IDENTIFICATION

##### **Emergency overview**

Appearance: Colorless liquid.

Immediate effects: Corrosive effect on skin, mucous membranes and eyes. Highly flammable

##### **Potential health effects**

Primary Routes of entry: Skin, Eyes, Inhalation and Ingestion

Signs and Symptoms of Overexposure: ND

Eyes: Strong corrosive effect.

Skin: Corrosive effect on skin.

Ingestion: Harmful if swallowed.

Inhalation: Slightly hazardous in case of inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: No

See Toxicological Information (Section 11)

##### **Potential environmental effects**

See Ecological Information (Section 12)



#### **SECTION-4. FIRST AID MEASURES**

##### **If accidental overexposure is suspected**

Eye(s) Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

Skin Contact: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

Ingestion: Seek immediate medical advice.

##### **Note to physician**

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

#### **SECTION-5. FIRE FIGHTING MEASURES**

Flash Point: 8°C (46°F)

Flammable Limits: Lower: 0.8 %. Upper: 16.3 %

Auto-ignition point: 380°C (716°F)

Fire Extinguishing Media: Carbon dioxide, sand, extinguishing. Do not use water.

Special Fire Fighting Procedures: ND

Unusual Fire and Explosion Hazards: ND

Hazardous combustion products: Carbon monoxide, Nitrogen oxides, ammonia

DOT Class: Flammable and corrosive.

#### **SECTION-6. ACCIDENTAL RELEASE MEASURES**

Steps to be Taken in Case Material is Released or Spilled:

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

#### **SECTION-7. HANDLING AND STORAGE**

Precautions to be Taken in Handling and Storage: Keep container tightly sealed. Store under dry protective gas. Ensure good ventilation in workplace. Keep away from ignition sources. Do not store together with acids. Store away from moisture and oxidizing agents.

Storage temperature: Cool temperatures and dry conditions.

Storage Pressure: ND

#### **SECTION-8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

##### **Engineering Controls**



Ventilation required: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

### **Personal Protection Equipment**

Respiratory protection: Use suitable respirator when high concentrations are present.

Protective gloves: Impervious gloves.

Skin protection: Gloves and protective clothing.

Eye protection: Full face shield, tightly sealed goggles, safety glasses.

Additional clothing and/or equipment: Eye washes and shower stations.

**Exposure Guidelines** :- See Composition/Information on Ingredients (Section2)

## **SECTION-9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance and Physical State: Colorless liquid.

Odor (threshold): Pungent

Specific Gravity (H<sub>2</sub>O=1): 0.775 at 25°C

Vapor Pressure (mm Hg): 103 hPa (77 mm Hg) at 50°C (122°F)

Vapor Density (air=1): > 1

Evaporation Rate (butyl acetate=1): ~ 1

Boiling Point: 123-127°C (253-261°F)

Freezing point / melting point: ND

Solubility in Water: Insoluble and reacts.

Molecular Weight: 161.3

## **SECTION-10. STABILITY AND REACTIVITY**

Stability: Stable in sealed containers in cool area.

Conditions to Avoid: Incompatible materials

Materials to Avoid (Incompatibility): Water/moisture, alcohols, oxidizing agents. Reacts with water/moisture releasing flammable gases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, ammonia

Hazardous Polymerization: Will not occur

## **SECTION-11. TOXICOLOGICAL INFORMATION**

Results of component toxicity test performed: Oral (mus, rat), LD50: 850 mg/Kg. Oral (rbt), LD50: 1100 mg/Kg. Dermal (gpg), LD50: 1000 mg/Kg. Dermal (rbt), LD50: 710 mg/Kg. Inhalation (mus), LC50: 12000 mg/M<sup>3</sup>/2 Hr. Inhalation (rat), LC50: 8700 mg/M<sup>3</sup>/4 Hr

Human experience: ND



**CHEMCON**  
Speciality Chemicals Pvt. Ltd.



Phone : 91-265-2511271 / 2512088 / 2561195  
Fax : 91-265-2571550 / 2563493  
Email : info@csapl.com  
expo@csapl.com  
Website : www.csapl.com

Manufacturing Location : Block no. 355-357, Kunpad Road,  
Vill. Manjusar, Taluka. Savli, VADODARA.  
GUJARAT, INDIA. 391775

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

## **SECTION-12. ECOLOGICAL INFORMATION**

Ecological Information: Ecotoxicity: LC50 (fish, Brachydanio rerio): 88 mg/l/96 Hr. EC50 Daphnia, Daphnia magna): 80 mg/l/48 Hr. EC50 (Algae, Scenedesmus subspicatus): 19 mg/l/72 Hr.

Chemical Fate Information: ND

## **SECTION-13. DISPOSAL INFORMATION**

RCRA 40 CFR 261 Classification: ND

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

## **SECTION-14. DEPARTMENT OF TRANSPORTATION (DOT)/TRANSPORT INFORMATION**

US DOT Information: Proper shipping name: Flammable liquid, corrosive, n.o.s. (1,1,1,3,3,3-Hexamethyldisilazane), Hazard Class: 3, (8), Packaging group: II, UN Number: UN2924

IATA: Proper shipping name: Flammable liquid, corrosive, n.o.s. (1,1,1,3,3,3-Hexamethyldisilazane) Hazard Class: 3, (8), Packing group: II, UN Number: UN2924

IMO: Proper shipping name: Flammable liquid, corrosive, n.o.s. (1,1,1,3,3,3-Hexamethyldisilazane) Class: 3, (8), UN Number: UN2924

Packing group: II

Marine Pollutant: No

## **SECTION-15. REGULATORY INFORMATION**

### **United States Federal Regulations**

MSDS complies with OSHAs Hazard Communication Rule 29, CFR 1910.1200.

SARA: CAS # 999-97-3: Immediate, fire, reactive.

SARA Title III: Section 302 (TPQ): None

RCRA: ND

TSCA: CAS# 999-97-3 is listed on the TSCA Inventory List

CERCLA: No RQ

### **State Regulations**

California Proposition 65: None

### **International Regulations**

All components of this product are listed on the Canadian Domestic Substances List (DSL)



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Canada WHMIS: This product has been classified in accordance with the hazard criteria of the CPR and contains all the information required by the CPR.

Europe EINECS Numbers: 21-346-0

## **SECTION-16. OTHER INFORMATION**

Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.

This information relates to the specific product designated and may not be valid for such product used in combination with any other materials or in any other processes. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the users' responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

Chemcon Speciality Chemicals reserves the right to refuse shipment of this product to any consumer who fails to demonstrate the ability to consistently handle and use it safely and in compliance with all applicable laws, rules and regulations. Such demonstration may require on-site inspection of any or all storage, processing, packaging and other handling systems that come in contact with it.

Customers are responsible for compliance with local and or state regulations that may be pertinent in the storage, application and disposal of this product.

