

## SAFETY DATA SHEET

---

### 1. IDENTIFICATION

**Product Name:** DAPCO™ 2000 Diluent  
**Product Description:** Silicone polymer solution  
**Synonyms:** None  
**Chemical Family:** Silicone  
**Molecular Formula:** Mixture  
**Molecular Weight:** Polymer  
**Intended/Recommended Use:** Diluent

CYTEC INDUSTRIES INC., 504 CARNEGIE CENTER, PRINCETON, NEW JERSEY 08540, USA

**For Product and all Non-Emergency Information call 1-800/652-6013.** Outside the USA and Canada call 1-973/357-3193.

**EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:**

**Asia Pacific:**

Australia - +61 2 8014 4558 (Carechem24)

China (PRC) - +86 0532 83889090 (NRCC) +86 512 8090 3042 (Carechem24)

New Guinea - +61 2 8014 4558 (Carechem24)

New Zealand - +64 9 929 1483 (Carechem24)

India, Japan, Korea, Malaysia, Thailand - +65 3158 1074 (Carechem24 Singapore)

India (Hindi Speaking Only) - +65 3158 1198 or 000800 100 7479 (Carechem24 Singapore)

**Canada:** 800 424 9300 (Within US,Canada) +1 (703) 527-3887 (International) (CHEMTREC)

**Europe/Africa/Middle East (Carechem24 UK):**

Europe, Middle East, Africa, Israel - +44 1235 239 670

(Arabic speaking countries) - +44 1235 239 671

**Latin America:**

Brazil - +55 11 3197 5891 (Carechem24)

Chile - +56 2 2582 9336 (Carechem24)

All Others - +44 1235 239 670 (Carechem24 UK)

**USA:** 800 424 9300 (Within US,Canada) +1 (703) 527-3887 (International) (CHEMTREC)

The ® indicates a Registered Trademark in the United States and the ™ indicates a trademark in the United States. The mark may also be registered, subject of an application for registration, or a trademark in other countries.

---

### 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable Liquid Hazard Category 2

**LABEL ELEMENTS**



**Signal Word**

Danger

**Hazard Statements**

Highly flammable liquid and vapor

**Precautionary Statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, dry chemical, or foam for extinction.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local and national regulations.

**Hazards Not Otherwise Classified (HNOC), Other Hazards**

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance, Mixture or Article?    Substance

**HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification	Carcinogen
Hexamethyldisiloxane 107-46-0	60 - 100	Flam. Liq. 2 (H225) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

**4. FIRST AID MEASURES****DESCRIPTION OF FIRST AID MEASURES****Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes.

**Skin Contact:**

Wash immediately with plenty of water and soap.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Material is not expected to be harmful if inhaled. Remove to fresh air.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

None known

**INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS**

**Notes To Physician:**

Formaldehyde is not a component of this product, however, heating to temperatures above 150 C in the presence of air may result in the release of formaldehyde. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer.

---

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:**

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

**Extinguishing Media to Avoid:**

full water jet

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus.

**Special Hazards:**

Keep containers cool by spraying with water if exposed to fire.

---

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

**Methods For Cleaning Up:**

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

**References to other sections:**

See Sections 8 and 13 for additional information.

---

## 7. HANDLING AND STORAGE

### HANDLING

**Precautions:** Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection.

**Special Handling Statements:** Heating to temperatures above 150 C (302 F) in the presence of air may result in the release of formaldehyde. Formaldehyde is a known animal carcinogen and is considered to be probably carcinogenic to humans by the International Agency for Research on Cancer and the National Toxicology Program. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer. The permissible exposure limit for formaldehyde should not be exceeded. Containers must be bonded and grounded when pouring or transferring material.

## STORAGE

Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed.

In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.

**Storage Temperature:** Store at <26.7 °C 80 °F

**Reason:** Quality.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Measures:

Engineering controls are not usually necessary if good hygiene practices are followed.

### Respiratory Protection:

For operations where inhalation exposure can occur, use an approved respirator recommended by an industrial hygienist after an evaluation of the operation. Where inhalation exposure cannot occur, no respiratory protection is required.

### Eye Protection:

Wear eye/face protection such as chemical splash proof goggles or face shield.

### Skin Protection:

Avoid skin contact. Wear impermeable gloves.

### Hand Protection:

Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

### Additional Advice:

Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

---

### Exposure Limit(s)

The below constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

No values have been established.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	colorless
<b>Appearance:</b>	clear liquid
<b>Odor:</b>	none
<b>Boiling Point:</b>	100 °C      212 °F
<b>Melting Point:</b>	Not available
<b>Vapor Pressure:</b>	35mm Hg @ 20 °C
<b>Specific Gravity/Density:</b>	0.76
<b>Vapor Density:</b>	5.5(air = 1)
<b>Percent Volatile (% by wt.):</b>	~100
<b>pH:</b>	Not available
<b>Saturation In Air (% By Vol.):</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Solubility In Water:</b>	Insoluble

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile Organic Content:</b>	Not applicable		
<b>Flash Point:</b>	-6.7 °C	20 °F	Pensky-Martens Closed Cup
<b>Flammability (solid, gas):</b>	Not available		
<b>Flammable Limits (% By Vol):</b>	Not available		
<b>Autoignition (Self) Temperature:</b>	Not available		
<b>Decomposition Temperature:</b>	Not available		
<b>Partition coefficient (n-octanol/water):</b>	Not available		
<b>Odor Threshold:</b>	Not available		
<b>Viscosity (Kinematic):</b>	Not available		

### DUST HAZARD INFORMATION

<b>Particle Size (microns):</b>	Not applicable
<b>Kst (bar-m/sec):</b>	Not applicable
<b>Maximum Explosion Pressure (Pmax):</b>	Not applicable
<b>Dust Class:</b>	Not applicable
<b>Minimum Ignition Energy (MIE) (mJ):</b>	Not applicable
<b>Minimum Ignition Temperature (MIT) (°C):</b>	Not applicable
<b>Minimum Explosive Concentration (MEC) (g/m³):</b>	Not applicable
<b>Limiting Oxygen Concentration (LOC) (%):</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available
<b>Stability:</b>	Stable
<b>Conditions To Avoid:</b>	None known
<b>Polymerization:</b>	May occur
<b>Conditions To Avoid:</b>	Avoid contact with oxidizing agents.
<b>Materials To Avoid:</b>	Oxidizing agents
<b>Hazardous Decomposition Products:</b>	silicon dioxide Formaldehyde Carbon dioxide

## 11. TOXICOLOGICAL INFORMATION

### PRODUCT TOXICITY INFORMATION

**Likely Routes of Exposure:** Skin, Eyes, Oral.

#### ACUTE TOXICITY DATA

oral (gavage)	rat	Acute LD50	No data
dermal	rabbit	Acute LD50	No data
inhalation	rat	Acute LC50 4 hr	No data

#### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	dermal	Not irritating
Acute Irritation	eye	No data

#### ALLERGIC SENSITIZATION

Sensitization	skin	No data
Sensitization	respiratory	No data

## GENOTOXICITY

### Assays for Gene Mutations

Ames Salmonella Assay No data

## OTHER INFORMATION

The product toxicity information above has been estimated.

## HAZARDOUS INGREDIENT TOXICITY DATA

Hexamethyldisiloxane has acute oral (rat) and acute dermal (rat) LD50 values of >12 g/kg and >2000 mg/kg. The acute inhalation (vapor) LC50 (rat/4 hour) value is 15956 ppm (106 mg/L). Direct contact with this substance is not expected to produce eye or skin irritation. This material did not produced dermal sensitization when tested in humans. Based on battery of in vitro and in vivo studies this substance is not mutagenic, genotoxic or clastogenic. A 28-day repeated dose toxicity study was conducted in male and female rats. The animals were dosed via oral gavage at nominal dose levels of 0, 8, 40, 160, and 640 mg/kg bw/day. The No Observed Adverse Effect Level (NOAEL) was 160 mg/kg bw/day based on reduced food consumption, reduced body weight gain, reduced liver weight, changes to white cell count and corpuscular parameters in male rats. In a repeated dose dermal toxicity study rats were exposed to 0, 100, 500 and 1000 mg/kg bw/d for five days per week (6/rs/day) for 28 days. The No Observed Effect Level (NOEL) was considered to be 500 mg/kg/day, based on reduced kidney and liver weights in males. There were no such effects in females. Overall, the NOAEL was considered to be  $\geq 1000$  mg/kg bw/day for human relevant effects. In a two-year combined chronic toxicity and oncogenicity whole body vapor inhalation study in rats, the target organs were kidney, nasal cavity and testes. Effects in the kidneys were considered species specific. Effects in the nasal cavity were considered to be irritative. Effects on the testes (Leydig cell tumours) were increased following exposure to all concentrations, but they are considered to be a spontaneous finding as they are common to this breed of rats and were also observed in control animals. Therefore the NOAEL for systemic effects relevant to humans is  $\geq 5000$  ppm (33.2 mg/l). Hexamethyldisiloxane is not expected to be a reproductive or developmental toxin.

---

## 12. ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

This material is not classified as dangerous for the environment.  
The ecological assessment for this material is based on an evaluation of its components.

## RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

**HAZARDOUS INGREDIENT TOXICITY DATA**

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Hexamethyldisiloxane 107-46-0	ErC50 >0.55 mg/L (measured)- Green Algae (70h)	LC50 = 0.46 mg/L - Rainbow Trout (96h)	Not available

**13. DISPOSAL CONSIDERATIONS**

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

**14. TRANSPORT INFORMATION**

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

**US DOT**

Dangerous Goods? X  
 Proper Shipping Name: Flammable liquid, n.o.s  
 Hazard Class: 3  
 Packing Group: II  
 UN/ID Number: UN1993  
 Transport Label Required: Flammable Liquid  
 Technical Name (N.O.S.): Siloxane

**TRANSPORT CANADA**

Dangerous Goods? X  
 Proper Shipping Name: Flammable liquid, n.o.s  
 Hazard Class: 3  
 Packing Group: II  
 UN Number: UN1993  
 Transport Label Required: Flammable Liquid  
 Technical Name (N.O.S.): Siloxane

**ICAO / IATA**

Dangerous Goods? X

Proper Shipping Name: Flammable liquid, n.o.s.  
Hazard Class: 3  
Packing Group: II  
UN Number: UN1993  
Transport Label Required: Flammable Liquid  
Technical Name (N.O.S.): Siloxane

## IMO

Dangerous Goods? X  
Proper Shipping Name: Flammable liquid, n.o.s.  
Hazard Class: 3  
UN Number: UN1993  
Packing Group: II  
Transport Label Required: Flammable Liquid  
Technical Name (N.O.S.): Siloxane

---

## 15. REGULATORY INFORMATION

### Inventory Information

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**European Economic Area (including EU):** Cytec has appointed an Only Representative to relieve our customers from their registration requirements under the REACH Regulation (EC) No. 1907/2006. Please contact us if you wish to benefit from the OR arrangement.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA

### PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Fire
-



## 16. OTHER INFORMATION

### NFPA Hazard Rating (National Fire Protection Association)

Health: 1 - Materials that, under emergency conditions, can cause significant irritation.

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

**Reasons For Issue:** Revised Section 1

**Date Prepared:** 02/05/2017

**Date of last significant revision:** 02/01/2017

### Hexamethyldisiloxane

H225 - Highly flammable liquid and vapor.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

---

Prepared By: Legal & Compliance Services; E-mail: [custinfo@solvay.com](mailto:custinfo@solvay.com)

---

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

---