

Safety Data Sheet DBP-313
Date of issue: 02/19/2015 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : DIMETHYLSILOXANE-(PROPYLENE OXIDE- ETHYLENE OXIDE) BLOCK COPOLYMER;

NON-SILOXANE 30%,

Product code : DBP-313

Synonyms : POLYALKYLENEOXIDE MODIFIED POLYDIMETHYLSILOXANE; SILOXANES AND

SILICONES, DIMETHYL, 3-HYDROXYPROPYL METHYL, ETHOXYLATED PROPOXYLATED

Chemical family : ORGANOSILOXANE

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Chemical intermediate

For research and industrial use only

## 1.3. Details of the supplier of the safety data sheet

## **GELEST, INC.**

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

## 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification (GHS-US)

Not classified

## 2.2. Label elements

## **GHS-US labeling**

No labeling applicable

## 2.3. Other hazards

No additional information available

## 2.4. Unknown acute toxicity (GHS-US)

No data available

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Substance type : Polymer

Name : DIMETHYLSILOXANE-(PROPYLENE OXIDE- ETHYLENE OXIDE) BLOCK COPOLYMER;

NON-SILOXANE 30%,

CAS No : 68937-55-3 EC no : 614-823-3

Name	Product identifier	%	Classification (GHS-US)
Siloxanes and Silicones, dimethyl, 3-hydroxypropyl methyl, ethoxylated propoxylated	(CAS No) 68937-55-3	> 95	Not classified
Polyalkyleneoxide	(CAS No) 9041-33-2	< 5	Not classified
Octamethylcyclotetrasiloxane	(CAS No) 556-67-2	< 2	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2B, H320

## 3.2. Mixture

Not applicable

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#### SECTION 4: First aid measures

## 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : No information available. Symptoms/injuries after skin contact : May cause skin irritation. Symptoms/injuries after eye contact : May cause eye irritation. Symptoms/injuries after ingestion : No information available.

## 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid all eye and skin contact and do not breathe vapor and mist.

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

## 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

## 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or

shovel spills into appropriate container for disposal.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

## 7.3. Specific end use(s)

No additional information available

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## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Safety glasses. Contact lenses should not be worn.

: No data available

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. NIOSH-certified organic vapor (black cartridge) respirator.

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear liquid. Viscous.

Molecular mass : 6000 - 18000 g/mol

Color : Pale yellow.

Odor : No data available

Odor threshold : No data available

Refractive index : 1.4161

pH : No data available Relative evaporation rate (butyl acetate=1) : No data available

Melting point : < 0 °C

Freezing point : No data available

Boiling point : > 205 °C

Flash point : > 110 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 5 mm Hg

Relative density : 0.988 VOC content : < 2 %

Solubility Insoluble in water. Log Pow No data available : No data available Log Kow : 800 - 1100 cSt Viscosity, kinematic Viscosity, dynamic No data available Explosive properties : No data available Oxidizing properties : No data available Explosive limits : No data available

## 9.2. Other information

Relative vapor density at 20 °C

No additional information available

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No additional information available

## 10.2. Chemical stability

Stable.

## 10.3. Possibility of hazardous reactions

No additional information available

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1	0.4	Conditions to av	/OIG

Heat. Open flame. Sparks.

## 10.5. Incompatible materials

Oxidizing agent.

## 10.6. Hazardous decomposition products

Formaldehyde. Organic acid vapors. Silicon dioxide.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

Octamethylcyclotetrasiloxane (556-67-2)		
LD50 oral rat	1540 mg/kg	
LD50 dermal rat	1770 mg/kg	
LD50 dermal rabbit	794 μl/kg	
LC50 inhalation rat (mg/l)	36 g/m³ (Exposure time: 4 h)	
ATE US (oral)	1540.000 mg/kg body weight	
ATE US (dermal)	1770.000 mg/kg body weight	
ATE US (vapors)	36.000 mg/l/4h	
ATE US (dust, mist)	36.000 mg/l/4h	

 Skin corrosion/irritation
 : Not classified

 Serious eye damage/irritation
 : Not classified

 Respiratory or skin sensitization
 : Not classified

 Germ cell mutagenicity
 : Not classified

This material was tested in a bacterial mutragenicity assay (Ames test) and was found to be

weakly mutagenic.

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

Repeated inhalation of low concentration respirable aerosols of the alkyleneoxide component of

this material (0.3 mg/m3 and higher produced injury in the lungs of rats.

Symptoms/injuries after inhalation : No information available. Symptoms/injuries after skin contact : May cause skin irritation. Symptoms/injuries after eye contact : May cause eye irritation. Symptoms/injuries after ingestion : No information available.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Octamethylcyclotetrasiloxane (556-67-2)		
LC50 fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)	
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)	

## 12.2. Persistence and degradability

Octamethylcyclotetrasiloxane (556-67-2)	
Persistence and degradability May cause long-term adverse effects in the environment.	

## 12.3. Bioaccumulative potential

Octamethylcyclotetrasiloxane (556-67-2)	
BCF fish 1	12400
Log Pow	5.1

## 12.4. Mobility in soil

No additional information available

## 12.5. Other adverse effects

Effect on ozone layer : No additional information available

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Effect on the global warming : No known ecological damage caused by this product.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Incinerate. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

#### **SECTION 14: Transport information**

#### 14.1. UN number

Not regulated for transport.

## 14.2. UN proper shipping name

Not applicable

#### 14.3. Additional information

Other information : No supplementary information available.

#### Transport by sea

No additional information available

#### Air transport

No additional information available

## **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

## Octamethylcyclotetrasiloxane (556-67-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

## Siloxanes and Silicones, dimethyl, 3-hydroxypropyl methyl, ethoxylated propoxylated (68937-55-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## Polyalkyleneoxide (9041-33-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2. International regulations

## Octamethylcyclotetrasiloxane (556-67-2)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

## Siloxanes and Silicones, dimethyl, 3-hydroxypropyl methyl, ethoxylated propoxylated (68937-55-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

## Polyalkyleneoxide (9041-33-2)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

## 15.3. US State regulations

DIMETHYLSILOXANE-(PROPYLENE OXIDE- ETHYLENE OXIDE) BLOCK COPOLYMER; NON-SILOXANE 30%, (68937-55-3)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	

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DIMETHYLSILOXANE-	PROPYLENE OXIDE- ETHYLE	NE OXIDE) BLOCK COPOLYN	MER; NON-SILOXANE 30%,(68	8937-55-3)
U.S California - Propo Toxicity - Female	sition 65 - Reproductive	No		
U.S California - Propo Toxicity - Male	sition 65 - Reproductive	No		
Octamethylcyclotetras	iloxane (556-67-2)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
Siloxanes and Silicone	s, dimethyl, 3-hydroxypropyl	methyl, ethoxylated propoxylate	ed <b>(68937-55-3)</b>	
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
Polyalkyleneoxide (904	11-33-2)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

## Octamethylcyclotetrasiloxane (556-67-2)

- U.S. Maine Chemicals of High Concern
- U.S. Minnesota Chemicals of High Concern U.S. Minnesota Chemicals of High Concern Persistent Bioaccumulative Toxins
- U.S. Oregon Priority Persistent Pollutant Tier I Persistent Pollutants
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

## **SECTION 16: Other information**

Abbreviations and acronyms

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

### Full text of H-phrases::

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 3	Flammable liquids Category 3
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H320	Causes eye irritation

### **HMIS III Rating**

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 1 Slight Hazard Physical : 0 Minimal Hazard

Prepared by safety and environmental affairs.

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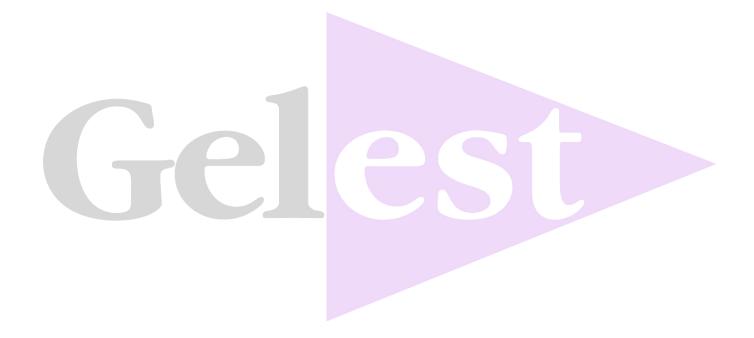
Safety Data Sheet

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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