



# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet DBE-921

Date of issue: 12/08/2014

Revision date: 07/16/2015

Version: 2.0

### 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-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER  
 Product code : DBE-921  
 Synonyms : POLYALKYLENEOXIDE MODIFIED POLYDIMETHYLSILOXANE; POLYALKYLENE POLYDIMETHYLSILOXANE  
 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](mailto:info@gelest.com) - [www.gelest.com](http://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-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER  
 CAS No : 68938-54-5  
 EC no : 614-827-5

| Name  | Product identifier  | %    | Classification (GHS-US)   |
|---|---------------------|------|---------------------------|
| Dimethylsiloxane-ethylene oxide block copolymer | (CAS No) 68938-54-5 | > 80 | Not classified            |
| Allyloxy(polyethylene oxide), methyl ether      | (CAS No) 27252-80-8 | < 20 | Acute Tox. 4 (Oral), H302 |

#### 3.2. Mixture

Not applicable

### 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.

# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet

|                                       |   |
|---------------------------------------|---|
| 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   | : May cause irritation to the respiratory tract. |
| Symptoms/injuries after skin contact | : May cause skin irritation.                     |
| Symptoms/injuries after eye contact  | : May cause eye irritation.                      |
| Symptoms/injuries after ingestion    | : May be harmful if swallowed.                   |

### 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. |
| Unsuitable extinguishing media | : None known.   |

### 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

|                      |  |
|----------------------|--|
| Protective equipment | : Wear protective equipment as described in Section 8. |
| Emergency procedures | : Evacuate unnecessary personnel.                      |

#### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal 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. Use only outdoors or in a well-ventilated area.  |
| 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

# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet

### 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                   | : Chemical goggles. Contact lenses should not be worn.   |
| 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                              | : 5000 g/mol             |
| Color                                       | : Pale yellow.           |
| Odor  | : No data available      |
| Odor threshold                              | : No data available      |
| Refractive index                            | : 1.451                  |
| pH  | : No data available      |
| Relative evaporation rate (butyl acetate=1) | : No data available      |
| Melting point                               | : -12 °C                 |
| Freezing point                              | : No data available      |
| Boiling point                               | : > 205 °C               |
| Flash point                                 | : > 65 °C                |
| Auto-ignition temperature                   | : No data available      |
| Decomposition temperature                   | : No data available      |
| Flammability (solid, gas)                   | : No data available      |
| Vapor pressure                              | : < 5 mm Hg              |
| Relative vapor density at 20 °C             | : No data available      |
| Relative density                            | : 1.08                   |
| VOC content                                 | : 3 %                    |
| Solubility                                  | : Soluble in water.      |
| Log Pow                                     | : No data available      |
| Log Kow                                     | : No data available      |
| Viscosity, kinematic                        | : 100 - 120 cSt          |
| Viscosity, dynamic                          | : No data available      |
| Explosive properties                        | : No data available      |
| Oxidizing properties                        | : No data available      |
| Explosion limits                            | : No data available      |

#### 9.2. Other information

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

# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Organic acid vapors. Formaldehyde. Silicon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### Allyloxy(polyethylene oxide), methyl ether (27252-80-8)

|               |                           |
|---------------|---------------------------|
| LD50 oral rat | > 500 mg/kg               |
| ATE US (oral) | 500.000 mg/kg body weight |

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer : No additional information available

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. Dispose of contents/container to licensed waste disposal facility.

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.

# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Allyloxy(polyethylene oxide), methyl ether (27252-80-8)

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

#### Dimethylsiloxane-ethylene oxide block copolymer (68938-54-5)

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

### 15.2. International regulations

#### Allyloxy(polyethylene oxide), methyl ether (27252-80-8)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on the Canadian DSL (Domestic Substances 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)

#### Dimethylsiloxane-ethylene oxide block copolymer (68938-54-5)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on the Canadian DSL (Domestic Substances 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)  
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### 15.3. US State regulations

#### DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER(68938-54-5)

|   |    |
|---|----|
| U.S. - California - Proposition 65 - Carcinogens List               | No |
| U.S. - California - Proposition 65 - Developmental Toxicity         | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male   | No |

#### Allyloxy(polyethylene oxide), methyl ether (27252-80-8)

|   |   |   |   |                                   |
|---|---|---|---|-----------------------------------|
| 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  |                                   |

#### Dimethylsiloxane-ethylene oxide block copolymer (68938-54-5)

|   |   |   |   |                                   |
|---|---|---|---|-----------------------------------|
| 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  |                                   |

## SECTION 16: Other information

Indication of changes

: Removed NA1993 classification. Removed classification from section 2.

# DIMETHYLSILOXANE-(85-90% ETHYLENE OXIDE) BLOCK COPOLYMER

## Safety Data Sheet

### 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.: Chemical 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 (Oral) | Acute toxicity (oral) Category 4 |
| H302                | Harmful if swallowed             |

### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 1 Slight Hazard  
Physical : 0 Minimal Hazard

Prepared by safety and environmental affairs.

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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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