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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Sub</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Substance name</td>
<td>MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric</td>
<td></td>
</tr>
<tr>
<td>Product code</td>
<td>MCR-M07</td>
<td></td>
</tr>
<tr>
<td>Synonyms</td>
<td>METHACRYLATE FUNCTIONAL SILICONE OIL; SILOXANES AND SILICONES, DI-ME, BU- AND 3-[(3-METHYL-1-OXO-2-PROPENYL)OXY]PROPYL-TERMINATED</td>
<td></td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOSILOXANE</td>
<td></td>
</tr>
</tbody>
</table>

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

GHS-US classification
Eye Irrit. 2A H319
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US): GHS07
Signal word (GHS-US): Warning
Hazard statements (GHS-US): H319 - Causes serious eye irritation
Precautionary statements (GHS-US): P280 - Wear protective gloves/protective clothing/eye protection/face protection
P264 - Wash hands thoroughly after handling
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

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

<table>
<thead>
<tr>
<th>Substance type</th>
<th>Mono-constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric</td>
</tr>
<tr>
<td>CAS No</td>
<td>146632-07-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monomethacryloxypropyl terminated polydimethylsiloxane</td>
<td>(CAS No) 146632-07-7</td>
<td>95 - 100</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>
## 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.

**First-aid measures after skin contact**: Wash with plenty of soap and water. Get medical advice/attention.

**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**: Causes serious 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


**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**: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

**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

**For containment**: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**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 in well ventilated areas.
- **Hygiene measures**: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

- **Storage conditions**: Keep container tightly closed. Store in a cool area. Store in a dark area.
- **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

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

### 8.1. Control parameters

#### 2,6-Di-tert-butyl-p-cresol (128-37-0)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA NIOSH</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 mg/m³ (inhalable fraction and vapor)</td>
<td></td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

### 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.
- **Molecular mass**: 600 - 800 g/mol
- **Color**: Deep Straw.
- **Odor**: No data available
- **Odor threshold**: No data available
- **Refractive index**: 1.416
- **pH**: No data available
- **Relative evaporation rate (butyl acetate=1)**: No data available
- **Melting point**: < -60 °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**: No data available
- **Relative vapor density at 20 °C**: No data available
- **Relative density**: 0.96
- **VOC content**: < 3 %
- **Solubility**: Insoluble in water.
- **Log Pow**: No data available
- **Log Kow**: No data available
- **Viscosity, kinetic**: 6 - 9 cSt
- **Viscosity, dynamic**: No data available
**MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric**

**Safety Data Sheet**

| 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 |
| Non-hazardous polymerization may occur. |

| 10.4. Conditions to avoid |
| Heat. Open flame. Sparks. |

| 10.5. Incompatible materials |
| Oxidizing agent. |

| 10.6. Hazardous decomposition products |
| Organic acid vapors. Silicon dioxide. |

**SECTION 11: Toxicological information**

| 11.1. Information on toxicological effects |
| Acute toxicity : Not classified |

| 2,6-Di-tert-butyl-p-cresol (128-37-0) |
| **LD50 oral rat** | 890 mg/kg |
| **LD50 dermal rat** | > 2000 mg/kg |
| **ATE US (oral)** | 890.000 mg/kg body weight |

| Skin corrosion/irritation : Not classified |
| Serious eye damage/irritation : Causes serious eye irritation. |
| Respiratory or skin sensitization : Not classified |
| Germ cell mutagenicity : Not classified |
| Carcinogenicity : Not classified |

| 2,6-Di-tert-butyl-p-cresol (128-37-0) |
| **IARC group** | 3 - Not classifiable |
| 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 : No information available. |
| Symptoms/injuries after skin contact : May cause skin irritation. |
| Symptoms/injuries after eye contact : Causes serious eye irritation. |
| Symptoms/injuries after ingestion : No information available. |

### 12.1. Toxicity
No additional information available

### 12.2. Persistence and degradability
No additional information available

### 12.3. Bioaccumulative potential

| 2,6-Di-tert-butyl-p-cresol (128-37-0) |
| **BCF fish 1** | 230 - 2500 |
| **Log Pow** | 4.17 |
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
Sewage disposal recommendations : Do not dispose of waste into sewer.
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
2,6-Di-tert-butyl-p-cresol (128-37-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Monomethacryloxypropyl terminated polydimethylsiloxane (146632-07-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
2,6-Di-tert-butyl-p-cresol (128-37-0)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECS (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)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed on INSO (Mexican national Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Monomethacryloxypropyl terminated polydimethylsiloxane (146632-07-7)
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)

15.3. US State regulations
MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric(146632-07-7)
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 : No
# MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric

## Safety Data Sheet

### MONOMETHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE, asymmetric(146632-07-7)

<table>
<thead>
<tr>
<th>Toxicity - Male</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>Non-significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### Monomethacryloxypropyl terminated polydimethylsiloxane (146632-07-7)

<table>
<thead>
<tr>
<th>Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>Non-significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

## 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.: 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
- **Eye Irrit. 2A**: Serious eye damage/eye irritation Category 2A
- **H302**: Harmful if swallowed
- **H319**: Causes serious eye irritation

### 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.

**Date of issue**: 10/24/2014  
**Revision date**: 10/27/2015  
**Version**: 2.0

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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