SECTION 1: Identification

1.1. Identification

Product name: [15-20% (ACRYLOXYPROPYL)METHYLSILOXANE]-DIMETHYLSILOXANE COPOLYMER Reduced Volatility

Product code: UMS-182R

Product form: Substance

Physical state: Liquid

Synonyms: ACRYLATE FUNCTIONAL SILICONE OIL

Chemical family: ORGANOSILICONE

1.2. Recommended use and restrictions on use

Recommended use: Chemical intermediate

1.3. Supplier

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: Hazard(s) Identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2A - H319 Causes serious eye irritation
Reproductive toxicity Category 2 - H361 Suspected of damaging fertility or the unborn child

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US):

Signal word (GHS US): Warning

Hazard statements (GHS US):

H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US):

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P204 - Wash hands thoroughly after handling.
P208 - Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P337+P313 - IF EYE IRRITATION PERSISTS: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste disposal facility.

2.3. Hazards not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type: Polymer

Name: [15-20% (ACRYLOXYPROPYL)METHYLSILOXANE]-DIMETHYLSILOXANE COPOLYMER Reduced Volatility
[15-20% (ACRYLOXYPROPYL)METHYLSILOXANE]-DIMETHYLSILOXANE COPOLYMER Reduced Volatility
Safety Data Sheet

CAS-No. : 158061-40-6

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Acryloxypropyl)methylsiloxane-dimethylsiloxane copolymer</td>
<td>(CAS-No.) 158061-40-6</td>
<td>95 - 100</td>
<td>Eye Irrit. 2A, H319</td>
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<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>(CAS-No.) 556-67-2</td>
<td>&gt; 0.1</td>
<td>Flam. Liq. 3, H226</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4 (Oral), H302</td>
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<td></td>
<td>Acute Tox. 4 (Dermal), H312</td>
</tr>
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<td></td>
<td></td>
<td>Eye Irrit. 2B, H320</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Repr. 2, H361</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 4, H413</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures
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 : Remove contact lenses, if present and easy to do. Continue rinsing. Immediately flush eyes thoroughly with water for at least 15 minutes. 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 (acute and delayed)

Symptoms/effects after inhalation : No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.

Symptoms/effects after skin contact : Allergic sensitization may occur. Avoid any direct contact with the product.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of ingestion.

4.3. Immediate medical attention and special treatment, if necessary
No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media
Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical
Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

5.3. Special protective equipment and precautions for fire-fighters
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.

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 locked up. Store < 5°C in dark.
Incompatible materials: Oxidizing agent.
Storage area: Store in a cool area. Store in a dark area. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Octamethylcyclotetrasiloxane (556-67-2)
AIHA WEEL TWA (ppm)
10 ppm

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

8.3. Individual protection measures/Personal protective equipment
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.
Color: Straw.
Odor: No data available
Odor threshold: No data available
Refractive index: No data available
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: 205 °C
[15-20% (ACRYLOXYPROPYL)METHYLSILOXANE]-DIMETHYLSILOXANE COPOLYMER Reduced Volatility
Safety Data Sheet

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>&lt; 6 %</td>
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<tr>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
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<tr>
<td>Log Kow</td>
<td>No data available</td>
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<tr>
<td>Viscosity, kinematic</td>
<td>80 - 180 cSt</td>
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<tr>
<td>Viscosity, dynamic</td>
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</tr>
<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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 below 20°C away from light and radical sources.

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

<table>
<thead>
<tr>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
</tr>
<tr>
<td>Carcinogenicity</td>
</tr>
</tbody>
</table>

None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single exposure: Not classified
Specific target organ toxicity – repeated exposure: Not classified

Aspiration hazard: Not classified

Symptoms/effects after inhalation: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.

Symptoms/effects after skin contact: Allergic sensitization may occur. Avoid any direct contact with the product.

Symptoms/effects after eye contact: Causes serious eye irritation.

Symptoms/effects after ingestion: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of ingestion.

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

No additional information available

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 the ozone layer: No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations: Do not dispose of waste into sewer.

Product/Packaging 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.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

(Acryloxypropyl)methylsiloxane-dimethylsiloxane copolymer (158061-40-6)

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

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 final TSCA section 4 test rule.
15.2. International regulations

**CANADA**

(Acryloxypropyl)methylsiloxane-dimethylsiloxane copolymer (158061-40-6)

| Listed on the Canadian NDSL (Non-Domestic Substances List) |

Octamethylcyclotetrasiloxane (556-67-2)

| Listed on the Canadian DSL (Domestic Substances List) |

**EU-Regulations**

No additional information available

Octamethylcyclotetrasiloxane (556-67-2)

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

**National regulations**

Octamethylcyclotetrasiloxane (556-67-2)

| Listed on the AICS (Australian Inventory of Chemical Substances) |
| 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) |
| Listed on INSQ (Mexican National Inventory of Chemical Substances) |
| Listed on CICR (Turkish Inventory and Control of Chemicals) |

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

- **H226**: Flammable liquid and vapor
- **H302**: Harmful if swallowed
- **H312**: Harmful in contact with skin
- **H319**: Causes serious eye irritation
- **H320**: Causes eye irritation
- **H361**: Suspected of damaging fertility or the unborn child
- **H413**: May cause long lasting harmful effects to aquatic life

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; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

Hazard Rating

- **Health**: 2 Moderate Hazard - Temporary or minor injury may occur
- **Flammability**: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
- **Physical**: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Prepared by safety and environmental affairs.

Date of issue: 11/09/2016  Revision date: 07/12/2019  Version: 1.2

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
[15-20% (ACRYLOXYPROPYL)METHYLSILOXANE]-DIMETHYLSILOXANE COPOLYMER Reduced Volatility

Safety Data Sheet

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