SECTION 1: Identification

1.1. Identification

Product name: HEXADECAMETHYLCYCLOOCTASILOXANE, 90%
Product code: SIH5919.8
Product form: Substance
Physical state: Liquid
Formula: C16H484O8S8
Synonyms: D8 CYCLOOCTASILOXANE, 2,2,4,4,6,6,8,8,10,10,12,12,14,14,16,16-HEXADECAMETHYL-
Chemical family: SILICONE

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: Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling: No labeling applicable

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: Mono-constituent
Name: HEXADECAMETHYLCYCLOOCTASILOXANE, 90%
CAS-No.: 556-68-3

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
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<tbody>
<tr>
<td>Hexadecamethylcyclooctasiloxane</td>
<td>(CAS-No.) 556-68-3</td>
<td>90 - 100</td>
<td>Not classified</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: 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 (acute and delayed)
Symptoms/effects after inhalation: May cause irritation to the respiratory tract. Overexposure may cause: Coughing. Headache. Nausea.
Symptoms/effects after skin contact: May cause skin irritation.
Symptoms/effects after eye contact: May cause eye irritation.
Symptoms/effects after ingestion: No information available.

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 to cool exposed surfaces.
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. Provide good ventilation in process area to prevent accumulation of vapors.
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.
Storage area: Store in a well-ventilated place. Store away from heat.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
No additional information available

8.2. Appropriate engineering controls
Appropriate engineering controls: Provide local exhaust or general room ventilation.
HEXADECAMETHYLICYCLOOCTASILOXANE, 90%
Safety Data Sheet

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:
Wear impervious gloves

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

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Where exposure through inhalation may occur from use, use full face NIOSH-certified respirator with APF of 50; organic vapor (black cartridge) is recommended, if air-purifying respirator selected.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
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<tr>
<td>Molecular mass</td>
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<td>Color</td>
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<tr>
<td>Odor</td>
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<tr>
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<tr>
<td>pH</td>
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<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
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<tr>
<td>Freezing point</td>
<td>-26 °C</td>
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<tr>
<td>Boiling point</td>
<td>97 °C @ 0.3 mm Hg</td>
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<tr>
<td>Flash point</td>
<td>&gt; 65 °C</td>
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<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Vapor pressure</td>
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<tr>
<td>Solubility</td>
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<tr>
<td>Log Kow</td>
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<tr>
<td>Viscosity, dynamic</td>
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<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</td>
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</tr>
<tr>
<td>Explosion limits</td>
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</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 in sealed containers.

10.3. Possibility of hazardous reactions
No additional information available
10.4. **Conditions to avoid**
Heat. Open flame. Sparks.

10.5. **Incompatible materials**
Oxidizing agent. Peroxides.

10.6. **Hazardous decomposition products**
Organic acid vapors.

**SECTION 11: Toxicological information**

11.1. **Information on toxicological effects**
- **Acute toxicity**: Not classified
- **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
  - None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
- **Reproductive toxicity**: Not classified
- **STOT-single exposure**: Not classified
- **STOT-repeated exposure**: Not classified
- **Aspiration hazard**: Not classified
- **Symptoms/effects after inhalation**: May cause irritation to the respiratory tract. Overexposure may cause: Coughing. Headache. Nausea.
- **Symptoms/effects after skin contact**: May cause skin irritation.
- **Symptoms/effects after eye contact**: May cause eye irritation.
- **Symptoms/effects after ingestion**: No information available.

**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**
- **Other adverse effects**: This substance may be hazardous to the environment.
- **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**: May be incinerated. 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

HEXADECAMETHYLCYCLOOCTASILOXANE, 90% (556-68-3)

| TSCA Exemption/Exclusion | CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States. |

Hexadecamethylcyclooctasiloxane (556-68-3)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations

Hexadecamethylcyclooctasiloxane (556-68-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Hexadecamethylcyclooctasiloxane (556-68-3)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

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

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
1 Slight Hazard - Irritation or minor reversible injury possible

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: 10/09/2019 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

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

Print date: 10/09/2019 EN (English US) SDS ID: SIHS919.8
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