SECTION 1: Identification

1.1. Identification

Product name: PHENYLMETHYLSILOXANE-DIPHENYLSILOXANE COPOLYMER
Product code: PMP-5025
Product form: Substance
Physical state: Liquid
Synonyms: (45-55% PHENYLMETHYLSILOXANE)-(45-55% DIPHENYLSILOXANE) COPOLYMER, TRIMETHYLSILYL TERMINATED PHENYLMETHYLSILOXANE COPOLYMER
Chemical family: ORGANOSILOXANE

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: Polymer
Name: PHENYLMETHYLSILOXANE-DIPHENYLSILOXANE COPOLYMER
CAS-No.: 308073-01-0

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenylmethylsiloxane-diphenylsiloxane copolymer</td>
<td>(CAS-No.) 308073-01-0</td>
<td>95 - 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: No information available.
- Symptoms/effects after skin contact: No information available.
- 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 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.
- Incompatible materials: Oxidizing agent.
- 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. If operating at temperatures above 175°C, ventilation is required. Mechanical is recommended.

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. Viscous.
- **Molecular mass:** 600 - 800 g/mol
- **Color:** Straw.
- **Odor:** No data available
- **Odor threshold:** No data available
- **Refractive index:** 1.543
- **pH:** No data available
- **Relative evaporation rate (butyl acetate=1):** No data available
- **Melting point:** Pour Point: -10°C
- **Freezing point:** No data available
- **Boiling point:** > 300 °C
- **Flash point:** > 205 °C
- **Auto-ignition temperature:** > 400 °C
- **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:** 1.08
- **% Volatiles:** < 3 %
- **Solubility:** Insoluble in water.
- **Log Pow:** No data available
- **Log Kow:** No data available
- **Viscosity, kinematic:** 300 - 600 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
PHENYL METHYLSILOXANE-DIPHENYL SILOXANE COPOLYMER
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10.2. Chemical stability
Stable.

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.

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</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.

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 information available.
Symptoms/effects after skin contact: No information available.
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
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.
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
PHENYL METHYLSILOXANE-DIPHENYLSILOXANE COPOLYMER
Safety Data Sheet

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

PHENYL METHYLSILOXANE-DIPHENYLSILOXANE COPOLYMER (308073-01-0)

TSCA Exemption/Exclusion
Low Volume Exemption in accordance with 40 CFR 723.50(c)(1). Use of this substance is restricted to use in high refractive index coating. Anyone who intends to use this chemical substance for commercial purposes must comply with specific use restrictions and controls specified herein. This LVE limits site of manufacture of this substance to Gelest, Inc. unless otherwise approved by U.S. EPA

Phenylmethylsiloxane-diphenylsiloxane copolymer (308073-01-0)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

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 : 0 Minimal Hazard - Materials that will not burn
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: 08/18/2016
Revision date: 10/30/2018
Version: 1.1

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
PHENYMETHYLSILOXANE-DIPHENYLSILOXANE COPOLYMER
Safety Data Sheet

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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NOTICE OF TSCA USE RESTRICTIONS AND REQUIRED CONTROLS FOR
PMP-5025
(45-55% PHENYLMETHYLSILOXANE)- (45-55%DIPHENYLSILOXANE), COPOLYMER

Dear Customer:

The chemical product purchased, PMP-5025 has been granted a Low Volume Exemption by the U.S. Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA) regulations (40 CFR 723.50). Any manufacturer or processor who intends to use this chemical substance for commercial purposes must comply with the specific use restrictions and controls specified as follows:

USE OF THIS CHEMICAL SUBSTANCE IS RESTRICTED TO: High refractive index coating

CONTROLS: Workers must use personal protection equipment to limit dermal and inhalation exposures as described in Section 8: Exposure Controls/Personal Protection of the Safety Data Sheet (SDS). These exposure controls include:

Hand protection: Impervious gloves (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: Air-purifying respirator with organic vapor cartridge.

WASTE DISPOSAL: Customer must rinse containers with solvent prior to disposal. Residues and wash solvents must be containerized for off-site disposal by incineration at licensed waste disposal facility. Do not release to publicly owned treatment works (POTW) via sewer or to surface waters.

If you have questions or need more information related to allowable use of this substance, contact Gelest Regulatory Affairs at 215-547-1015.

Best Regards,

Gelest, Inc.
Regulatory Affairs Department