



Safety Data Sheet PDV-0331

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Version: 1.2

**SECTION 1: Identification**

**1.1. Identification**

Product name : VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER  
 Product code : PDV-0331  
 Product form : Substance  
 Physical state : Liquid  
 Synonyms : VINYL TERMINATED DIMETHYL-DIPHENYLSILOXANE COPOLYMER; SILOXANES and SILICONES, DIMETHYL, DIPHENYL, VINYL GROUP-TERMINATED  
 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](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: 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)**

**2.4. Unknown acute toxicity (GHS US)**

**SECTION 3: Composition/Information on ingredients**

**3.1. Substances**

Substance type : Polymer  
 Name : VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER  
 CAS-No. : 68951-96-2

| Name   | Product identifier   | %        | GHS US classification   |
|--|----------------------|----------|---|
| Vinyl terminated dimethyl-diphenylsiloxane copolymer | (CAS-No.) 68951-96-2 | 95 – 100 | Not classified  |
| Octamethylcyclotetrasiloxane                         | (CAS-No.) 556-67-2   | 0 – 3    | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311<br>Eye Irrit. 2B, H320<br>Repr. 2, H361<br>Aquatic Chronic 4, H413 |

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

**3.2. Mixtures**

Not applicable

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## 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 : 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

- Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.
- 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

- 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.
- 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.

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## 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. Viscous. |
| Molecular mass                                  | : 27000 g/mol            |
| Color   | : No data available      |
| Odor  | : No data available      |
| Odor threshold                                  | : No data available      |
| Refractive index                                | : 1.42                   |
| pH  | : No data available      |
| Relative evaporation rate (butyl acetate=1)     | : No data available      |
| Melting point                                   | : < 0 °C                 |
| Freezing point                                  | : No data available      |
| Boiling point                                   | : > 205 °C               |
| Flash point                                     | : 205 °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                                | : 0.97 – 0.99            |
| % Volatiles                                     | : < 3 %                  |
| Solubility                                      | : Insoluble in water.    |
| Partition coefficient n-octanol/water (Log Pow) | : No data available      |
| Partition coefficient n-octanol/water (Log Kow) | : No data available      |
| Viscosity, kinematic                            | : 1000 cSt               |
| Viscosity, dynamic                              | : No data available      |
| Explosive properties                            | : No data available      |
| Oxidizing properties                            | : No data available      |
| Explosion limits                                | : No data available      |

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## 9.2. Other information

## 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

### 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 (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

| Octamethylcyclotetrasiloxane (556-67-2) |  |
|---|--|
| LD50 oral rat                           | 1540 mg/kg RTECS Number: GZ4397000       |
| LD50 dermal rat                         | 1770 mg/kg                               |
| LD50 dermal rabbit                      | 794 µl/kg                                |
| LC50 Inhalation - Rat                   | 36 g/m <sup>3</sup> (Exposure time: 4 h) |
| ATE US (oral)                           | 1540 mg/kg body weight                   |
| ATE US (dermal)                         | 794 mg/kg body weight                    |
| ATE US (vapors)                         | 36 mg/l/4h                               |
| ATE US (dust, mist)                     | 36 mg/l/4h                               |

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

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : No information available.

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

| 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

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|   |       |
|---|-------|
| <b>Octamethylcyclotetrasiloxane (556-67-2)</b>  |       |
| BCF - Fish [1]                                  | 12400 |
| Partition coefficient n-octanol/water (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.  
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

### 14.3. Additional information

Other information : No supplementary information available.

### Transport by sea

### Air transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

|   |  |
|---|--|
| <b>Octamethylcyclotetrasiloxane (556-67-2)</b>                            |  |
| 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. |
| <b>Vinyl terminated dimethyl-diphenylsiloxane copolymer (68951-96-2)</b>  |  |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |  |

### 15.2. International regulations

#### CANADA

|  |  |
|--|--|
| <b>Octamethylcyclotetrasiloxane (556-67-2)</b>                           |  |
| Listed on the Canadian DSL (Domestic Substances List)                    |  |
| <b>Vinyl terminated dimethyl-diphenylsiloxane copolymer (68951-96-2)</b> |  |
| Listed on the Canadian DSL (Domestic Substances List)                    |  |

#### EU-Regulations

|  |  |
|--|--|
| <b>Octamethylcyclotetrasiloxane (556-67-2)</b>   |  |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |  |

#### National regulations

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## Octamethylcyclotetrasiloxane (556-67-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
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 KECL/KECI (Korean Existing Chemicals Inventory)  
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)

## Vinyl terminated dimethyl-diphenylsiloxane copolymer (68951-96-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
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 Japanese ISHL (Industrial Safety and Health Law)  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

### 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                                   |
| H311 | Toxic in contact with skin                             |
| 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 : 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.

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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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