

Safety Data Sheet VDT-954

Date of issue: 10/21/2014 Revision date: 03/23/2018 Version: 2.0

## **SECTION 1: Identification**

### 1.1. Identification

Product name : (11.0-13.0% VINYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER,

TRIMETHYLSILOXY TERMINATED

Product code : VDT-954
Product form : Substance
Physical state : Liquid

Synonyms : VINYLMETHYLSILOXANE COPOLYMER; VINYLDIMETHICONE;

DIMETHYLMETHYLVINYLSILOXANE

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 : (11.0-13.0% VINYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER,

TRIMETHYLSILOXY TERMINATED

CAS-No. : 67762-94-1

Name	Product identifier	%	GHS-US classification
Dimethylmethylvinylsiloxane	(CAS-No.) 67762-94-1	> 97	Not classified
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 2	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2B, H320 Repr. 2, H361 Aquatic Chronic 4, H413

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.

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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.

## Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May be harmful if inhaled. Symptoms/effects after skin contact : May cause mild skin irritation. Symptoms/effects after eye contact : May cause mild eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

## Immediate medical attention and special treatment, if necessary

No additional information available

## **SECTION 5: Fire-fighting measures**

## Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media : None known.

## 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.

## 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.

: Do not enter fire area without proper protective equipment, including respiratory protection. Protection during firefighting

Avoid all eye and skin contact and do not breathe vapor and mist.

## **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures 6.1.

#### 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

## **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 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

: Clean up any spills as soon as possible, using an absorbent material to collect it. Methods for cleaning up

# Reference to other sections

See Heading 8. Exposure controls and personal protection.

# SECTION 7: Handling and storage

# 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

Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild Hygiene measures

soap and water before eating, drinking or smoking and when leaving work.

## 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:

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, 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 extremely viscous liquid.

Molecular mass : 225000 g/mol

Molecular mass Color No data available Odor No data available Odor threshold No data available Refractive index No data available No data available pΗ Relative evaporation rate (butyl acetate=1) : No data available : No data available Melting point : No data available Freezing point **Boiling point** : > 205 °C Flash point

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : 0.98 % Volatiles : < 3 %

Solubility Insoluble in water. Log Pow : No data available : No data available Log Kow 300000 - 500000 cSt Viscosity, kinematic 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

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

No additional information available

## 10.4. Conditions to avoid

No additional information available

# 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

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 (mg/l)	36 g/m³ (Exposure time: 4 h)			
ATE US (oral)	1540 mg/kg body weight			
ATE US (dermal)	1770 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

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.

The classification is based on reproductive studies in animals.

Octamethylcyclotetrasiloxane: Rat TDLo (Inhalation) 500 ppm, male 70 days and 70 days prior to mating - 3 weeks after birth prior to mating. Toxic Effects: Effects on Newborn - Live birth

index.

Specific target organ toxicity - single exposure : Not classified

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May be harmful if inhaled.

Symptoms/effects after skin contact : May cause mild skin irritation.

Symptoms/effects after eye contact : May cause mild eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

# **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)		

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## 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.

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

## 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.

## Dimethylmethylvinylsiloxane (67762-94-1)

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

# 15.2. International regulations

# CANADA

## Octamethylcyclotetrasiloxane (556-67-2)

Listed on the Canadian DSL (Domestic Substances List)

# Dimethylmethylvinylsiloxane (67762-94-1)

Listed on the Canadian DSL (Domestic Substances List)

## **EU-Regulations**

# Octamethylcyclotetrasiloxane (556-67-2)

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

# Dimethylmethylvinylsiloxane (67762-94-1)

Listed on ELINCS (European List of Notified Chemical Substances)

# **National regulations**

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## 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)

# Dimethylmethylvinylsiloxane (67762-94-1)

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 Korean ECL (Existing Chemicals List)

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
H312	Harmful 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.: Chemcial 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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