

Safety Data Sheet SIT7900.0
Date of issue: 11/06/2014 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : 1,3,5,7-TETRAVINYL-1,3,5,7-TETRAMETHYLCYCLOTETRASILOXANE

Product code : SIT7900.0
Formula : C12H24O4Si4

Synonyms : METHYLVINYLCYCLOSILOXANE;

TETRAMETHYLTETRAETHENYLCYCLOTETRASILOXANE; TETRAMETHYLTETRAVINYLCYCLOTETRASILOXANE

Chemical family : ORGANOSILOXANE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Chemical intermediate

For research and industrial use only

#### 1.3. Details of the supplier of the safety data sheet

#### **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: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### **Classification (GHS-US)**

Not classified

#### 2.2. Label elements

# **GHS-US** labeling

No labeling applicable

## 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Substance type : Mono-constituent

Name : 1,3,5,7-TETRAVINYL-1,3,5,7-TETRAMETHYLCYCLOTETRASILOXANE

CAS No : 2554-06-5 EC no : 219-863-1

Name	Product identifier	%	Classification (GHS-US)
1,3,5,7-Tetravinyl-1,3,5,7-tetramethylcyclotetrasiloxane	(CAS No) 2554-06-5	> 95	Not classified

## 3.2. Mixture

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 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.

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, both acute and delayed

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

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

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

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

Unsuitable extinguishing media : None known.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

Reactivity : Can react violently in the simultaneous presence of hydridosilanes and precious metal

compounds.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire.

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

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper 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. Provide good ventilation in

process area to prevent accumulation of vapors.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

#### 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.

## 7.3. Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

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#### 8.2. Exposure controls

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

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 : 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.

Molecular mass : 344.66 g/mol

Color : No data available

Odor : Characteristic. Mild.

Odor threshold : No data available

Refractive index : 1.4342

pH : No data available

Relative evaporation rate (butyl acetate=1) :  $\sim 1$  Melting point :  $\sim 43$  °C

Freezing point : No data available
Boiling point : 110 °C @ 10 mm Hg

Flash point : 112 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 1 mm Hg @ 25°C

Relative vapor density at 20 °C : > 1
Relative density : 0.998
VOC content : 100 %

Solubility : Insoluble in water.
Log Pow : No data available
Log Kow : No data available

Viscosity, kinematic : 3.9 cSt

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

# 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Can react violently in the simultaneous presence of hydridosilanes and precious metal compounds.

## 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.

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# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

1,3,5,7-Tetravinyl-1,3,5,7-tetramethylcyclotetrasiloxane (2554-06-5)		
LD50 oral rat	> 15000 mg/kg	
Toxicity information	> 1320 mg/m³ (lethal concentration: 4H)	

 Skin corrosion/irritation
 : Not classified

 Serious eye damage/irritation
 : Not classified

 Respiratory or skin sensitization
 : Not classified

 Germ cell mutagenicity
 : Not classified

Mutation in Mammalian Somatic Cells: rat fibroblast 50 umol/L

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

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

## **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 ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Waste 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

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## 1,3,5,7-Tetravinyl-1,3,5,7-tetramethylcyclotetrasiloxane (2554-06-5)

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

#### 15.2. International regulations

#### 1,3,5,7-Tetravinyl-1,3,5,7-tetramethylcyclotetrasiloxane (2554-06-5)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

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

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)

**Developmental Toxicity** 

Nο

#### 15.3. US State regulations

1,3,5,7-TETRAVINYL-1	1,3,5,7-TETRAVINYL-1,3,5,7-TETRAMETHYLCYCLOTETRASILOXANE(2554-06-5)						
U.S California - Propo	sition 65 - Carcinogens List	No					
U.S California - Propo Toxicity	sition 65 - Developmental	No					
U.S California - Propo Toxicity - Female	sition 65 - Reproductive	No					
U.S California - Proposition 65 - Reproductive Toxicity - Male		No					
1,3,5,7-Tetravinyl-1,3,5,7-tetramethylcyclotetrasiloxane (2554-06-5)							
U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	No significance risk level (NSRL)			

Reproductive Toxicity -

Female

No

#### **SECTION 16: Other information**

Abbreviations and acronyms

Carcinogens List

Nο

: 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.

Reproductive Toxicity -

Male

No

## **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard

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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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