

Safety Data Sheet SIM6510.0
Date of issue: 12/18/2014 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 : METHYLHYDROCYCLOSILOXANES, 95%

Product code : SIM6510.0 Formula : (CH3HSiO)3-5

Synonyms : METHYL HYDROGEN CYCLIC SILOXANES; CYCLOSILOXANES, METHYLHYDROGEN-

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)

Flam. Liq. 3 H226

Full text of H-phrases: see section 16

### 2.2. Label elements

## **GHS-US labeling**

Hazard pictograms (GHS-US)



GHS02

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

Precautionary statements (GHS-US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P210 - Keep away from heat, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P370+P378 - In case of fire: Use water spray or fog, foam, carbon dioxide, dry chemical to

extinguish

P403+P235 - Keep in a cool place

P501 - Dispose of contents/container to licensed waste disposal facility.

### 2.3. Other hazards

No additional information available

# 2.4. Unknown acute toxicity (GHS-US)

No data available

12/18/2014 EN (English US) SDS ID: **SIM6510.0** Page 1

Safety Data Sheet

## SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Substance type : Multi-constituent

Name : METHYLHYDROCYCLOSILOXANES, 95%

CAS No : 68037-53-6 EC no : 614-220-5

Name	Product identifier	%	Classification (GHS-US)
Methylhydrocyclosiloxanes	(CAS No) 68037-53-6	> 95	Flam. Liq. 3, H226
Tetramethylcyclotetrasiloxane	(CAS No) 2370-88-9	< 5	Flam. Liq. 3, H226

#### 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.

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 : No information available.

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

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

Symptoms/injuries after ingestion : No information available.

## 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.

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

Fire hazard : Flammable liquid and vapor. Irritating fumes and organic acid vapors may develop when

material is exposed to elevated temperatures or open flame.

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

General measures : Remove ignition sources. Use special care to avoid static electric charges.

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. Use only non-sparking tools.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

12/18/2014 EN (English US) SDS ID: **SIM6510.0** 2/6

# Safety Data Sheet

## **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. Containers must be properly grounded before

beginning transfer. Use only non-sparking tools.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep container tightly closed.

Incompatible materials : Alkalis. Metal salts. Oxidizing agent. Precious metals. 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

### 8.2. Exposure controls

Skin and body protection

Odor threshold

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

Personal protective equipment : Emergency eye wash fountains and safety showers should be available in the immediate

vicinity of any potential exposure. Avoid all unnecessary exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles. Contact lenses should not be worn.

: Wear suitable protective clothing.

: No data available

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 : 180 - 300 g/mol

Color : No data available

Odor : No data available

Refractive index : 1.39

pH : No data available Relative evaporation rate (butyl acetate=1) : No data available

Melting point : -69 °C

Freezing point : No data available
Boiling point : 134 - 204 °C
Flash point : 31 °C
Auto-ignition temperature : 239 °C

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapor

Vapor pressure : No data available

Relative vapor density at 20 °C : > 1Relative density : 0.99VOC content : > 95 %

Solubility : Insoluble in water. Log Pow : No data available Log Kow : No data available Viscosity, kinematic No data available Viscosity, dynamic No data available Explosive properties : No data available Oxidizing properties : No data available Explosive limits No data available

12/18/2014 EN (English US) SDS ID: **SIM6510.0** 3/6

# Safety Data Sheet

### 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 stored under a dry inert atmosphere.

### 10.3. Possibility of hazardous reactions

The product can generate small amounts of hydrogen when exposed to alkalis and protic materials such as water and alcohol in combination with metal salts such as aluminum chloride or precious metals such as platinum.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Alkalis. Metal salts. Oxidizing agent. Precious metals.

### 10.6. Hazardous decomposition products

Carbon monoxide. Formaldehyde. Hydrogen. Organic acid vapors. Silicon dioxide.

## **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

: Not classified Acute toxicity Skin corrosion/irritation : Not classified Serious eye damage/irritation Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Not classified Carcinogenicity 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 : No information available. Symptoms/injuries after skin contact : May cause skin irritation. Symptoms/injuries after eye contact : May cause eye irritation. Symptoms/injuries 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 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. Dispose of

contents/container to licensed waste disposal facility.

Ecology - waste materials : Avoid release to the environment

12/18/2014 EN (English US) SDS ID: **SIM6510.0** 4/6

# Safety Data Sheet

## SECTION 14: Transport information

14.1. UN number

UN-No.(DOT) : 1993 DOT NA no. UN1993

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.

(METHYLHYDROCYCLOSILOXANES)

Department of Transportation (DOT) Hazard

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Classes

Hazard labels (DOT) : 3 - Flammable liquid



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : IMO IMDG- code: 3.2.

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

# **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

### Tetramethylcyclotetrasiloxane (2370-88-9)

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

# Methylhydrocyclosiloxanes (68037-53-6)

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

### 15.2. International regulations

# Tetramethylcyclotetrasiloxane (2370-88-9)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian NDSL (Non-Domestic Substances 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 NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Korean ECL (Existing Chemicals List)

### Methylhydrocyclosiloxanes (68037-53-6)

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 Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

# 15.3. US State regulations

METHYLHYDROCYCLOSILOXANES, 95%(68037-53-6)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	

12/18/2014 EN (English US) SDS ID: **SIM6510.0** 5/6

Safety Data Sheet

METHYLHYDROCYCLO	OSILOXANES, 95%(68037-53-6			
U.S California - Propo Toxicity - Female	sition 65 - Reproductive	No		
U.S California - Propo Toxicity - Male	sition 65 - Reproductive	No		
Tetramethylcyclotetras	siloxane (2370-88-9)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
Methylhydrocyclosilox	anes (68037-53-6)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

## **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.: 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.

## Full text of H-phrases::

Flam. Liq. 3	Flammable liquids Category 3	
H226	Flammable liquid and vapor	

### **HMIS III Rating**

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

Flammability : 3 Serious Hazard
Physical : 1 Slight Hazard

Prepared by safety and environmental affairs.

Date of issue: 12/18/2014 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

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

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.

© 2014 Gelest Inc. Morrisville, PA 19067

12/18/2014 EN (English US) SDS ID: **SIM6510.0** 6/6