



DIMETHYLSILA-17-CROWN-6, 90%

Safety Data Sheet SID4220.6

Date of issue: 11/28/2016 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

| | |
|-----------------|--|
| Product name | : DIMETHYLSILA-17-CROWN-6, 90% |
| Product code | : SID4220.6 |
| Product form | : Substance |
| Physical state | : Liquid |
| Formula | : C ₁₂ H ₂₆ O ₆ Si |
| Synonyms | : SILA-17-CROWN-6, 1,1-DIMETHYL-2,2-DIMETHYL-1,3,6,9,12,15-HEXAOXA-2-SILACYCLOHEPTADECANE 1,1-DIMETHYL-1-SILA-2,5,8,11,14,17-HEXAOXACYCLOHEPTADECANE 1,3,6,9,12,15-HEXAOXA-2-SILACYCLOHEPTADECANE, 2,2-DIMETHYL-1,1-DIMETHYLSILA-17-CROWN- |
| Chemical family | : ORGANOSILANE ESTER |

1.2. Recommended use of the chemical and restrictions on use

| | |
|-----------------|---|
| Recommended use | : 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: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | |
|---|------------------|
| Skin corrosion/irritation Category 2 | H315 |
| Serious eye damage/eye irritation Category 2A | H319 |
| Full text of H statements | : see section 16 |

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

| | |
|-----------------------------------|---|
| Signal word (GHS-US) | : Warning |
| Hazard statements (GHS-US) | : H315 - Causes skin irritation H319 - Causes serious eye irritation |
| Precautionary statements (GHS-US) | : P280 - Wear protective gloves/protective clothing/eye protection/face protection P264 - Wash hands thoroughly after handling P302 + P352 - If on skin: Wash with plenty of soap and water P332 + P313 - If skin irritation occurs: Get medical advice/attention P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention P321 - Specific treatment (see first aid instructions on this label) P362 + P364 - Take off contaminated clothing and wash it before reuse |

2.3. Hazards not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

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SECTION 3: Composition/Information on ingredients

3.1. Substance

Substance type : Multi-constituent
Name : DIMETHYLSILA-17-CROWN-6, 90%
CAS No : 83890-22-6

| Name | Product identifier | % | GHS-US classification |
|-------------------------|---------------------|----------|--|
| Dimethylsila-17-crown-6 | (CAS No) 83890-22-6 | 90 - 100 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| Dimethylsila-20-crown-7 | (CAS No) 83890-23-7 | 0 - 10 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |

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

3.2. Mixture

Not applicable

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, both acute and delayed

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

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious 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.

Unsuitable extinguishing media : Do not use straight streams.

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.

5.3. Advice for firefighters

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.

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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 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. 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 : 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.

Molecular mass : 294.42 g/mol

Color : No data available

Odor : Characteristic.

Odor threshold : No data available

Refractive index : 1.457

pH : No data available

Relative evaporation rate (butyl acetate=1) : < 1

Melting point : 0 - 1 °C

Freezing point : No data available

Boiling point : 168 - 170 °C @ 0.3 mm Hg

Flash point : > 110 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 0.1 mm Hg @ 25°C

Relative vapor density at 20 °C : ~ 7.5

Relative density : 1.09

VOC content : 100 %

Solubility : Reacts slowly with water. Soluble 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

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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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Material decomposes slowly in contact with moist air or with water liberating pentaethyleneglycol.

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Organic acid vapors. Pentaethyleneglycol. Silicon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|---|--|
| Acute toxicity | : Not classified |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Material generates pentaethyleneglycol on contact with water or moisture in skin, eyes and mucous membranes and has an irritating, dehydrating effect on overexposed tissue. |
| Symptoms/injuries after inhalation | : May cause irritation to the respiratory tract. |
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| Symptoms/injuries after eye contact | : Causes serious eye irritation. |
| Symptoms/injuries after ingestion | : No information available. |
| Reason for classification | : Expert judgment |

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

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Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.
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

Dimethylsila-20-crown-7 (83890-23-7)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Dimethylsila-17-crown-6 (83890-22-6)

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

15.2. International regulations

CANADA

No additional information available

Dimethylsila-17-crown-6 (83890-22-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

Dimethylsila-17-crown-6 (83890-22-6)

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

National regulations

Dimethylsila-17-crown-6 (83890-22-6)

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 PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Full text of H-phrases::

| | |
|------|-------------------------------|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |

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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.

HMIS III Rating

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