According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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| Devi       |  |              |   |   |
|------------|--|--------------|---|---|
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|            |  |              |   | <i>,</i> , , , , ,  |
|            | TION 1: Identification of the substar  | nce/mixtur   | e and of the  | company/undertaking   |
| 1.1        | Product identifier:<br>Commercial product name:  |              | Duplicating   | <ul> <li>component A<br/>silicone</li> <li>ance/ mixture contains nanoforms</li> </ul>  |
| 1.2        | Polovant identified uses of the cul  | hotonoo or   | mixture on  | d uses advised equinate   |
| 1.2        | Relevant identified uses of the sub  | ostance or   |   |   |
|            | Identified uses:   |              |   | liverse objects.  |
|            | Uses advised against:  |              | None know   | /n.   |
| 4.0        |  |              | - 1   |   |
| 1.3        | Details of the supplier of the safet   | y data she   |   |   |
|            | Manufacturer/Supplier:   |              |   | NRICHS Dental GmbH  |
|            | Street / mailbox:  |              | Borsigstr. 7  |   |
|            | Country code. / postal code / city:  |              | D - 38644   |   |
|            | Phone:   |              | 0 53 21 / 5   | 06 24   |
|            | Fax:   |              | 0 53 21 / 5   | 08 81   |
|            | E-mail / Website:  |              | info@hinrio   | <u>chs-dental.de</u> / <u>www.hinrichs-dental.de</u>  |
|            | Further information obtainable fro   | m:           | ERNST HI  | NRICHS Dental GmbH  |
|            |  |              |   |   |
| 1.4        | Emergency telephone number   |              |   |   |
|            | ERNST HINRICHS Dental GmbH:  |              | +49 (0) 53  | 21 / 5 06 24 (Mon-Fri. 8 a.m. – 4 p.m.)   |
|            |  |              |   |   |
| SEC        | TION 2: Hazards identification   |              |   |   |
| 2.1.       | Classification of the substance or   | mixture:     | The produc  | t has been classified according to the legislation in   |
|            |  |              | force.  |   |
|            |  |              |   |   |
|            | Classification according to Regula   | ation (EC) l | No 1272/200   | 18 as amended.  |
|            |  |              |   |   |
|            | Health Hazards:  |              |   |   |
|            | Specific Target Organ Toxicity -   |              |   |   |
|            |  | Category     | 2   | H373: May cause damage to organs through  |
|            | Repeated Exposure  | Category     | 2   | prolonged or repeated exposure. (Target Organs:   |
|            |  | Category 2   | 2   |   |
|            | Repeated Exposure  | Category 2   | 2   | prolonged or repeated exposure. (Target Organs:   |
| 2.2        | Repeated Exposure  | Category 2   |   | prolonged or repeated exposure. (Target Organs:<br>Lung)  |
| 2.2        | Repeated Exposure  | Category 2   |   | prolonged or repeated exposure. (Target Organs:   |
| 2.2        | Repeated Exposure  | Category 2   | EUH210: \$  | prolonged or repeated exposure. (Target Organs:<br>Lung)  |
| 2.2        | Repeated Exposure  | Category 2   | EUH210: \$  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.   |
| 2.2        | Repeated Exposure  | Category :   | EUH210: S<br>EUH066: F  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.   |
| 2.2<br>2.3 | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:  | Category     | EUH210: S<br>EUH066: F  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:  | Category     | EUH210: S<br>EUH066: F<br>cracking.   | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:                                   | Category :   | EUH210: S<br>EUH066: F<br>cracking.   | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category :   | EUH210: S<br>EUH066: F<br>cracking.   | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:                                   | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre   | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre   | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>recommendations.<br>eated silica: When encapsulated in a polymer, is not<br>pose a health hazard when processed under<br>iditions of use. Although classified according to EC   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>recommendations.<br>e recommendations.<br>e recommendations.<br>e a health hazard when processed under<br>iditions of use. Although classified according to EC<br>s product is exempt from labelling according to   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.<br>A recommendations.<br>A recommendations.<br>A recommendations of use. Although classified according to EC<br>is product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this<br>article 23 a  | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.<br>A recommendations.<br>A recommendations.<br>A recommendations of use. Although classified according to EC<br>is product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:<br>Inhalation: | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this<br>article 23 a<br>n°1272/200                              | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.<br>e recommendations.<br>e te commendations.<br>e te commendations of use. Although classified according to EC<br>s product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)<br>08.   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:                | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this<br>article 23 a<br>n°1272/200                              | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.<br>A recommendations.<br>A recommendations.<br>A recommendations of use. Although classified according to EC<br>is product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:<br>Inhalation: | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this<br>article 23 a<br>n°1272/200<br>No specific               | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>recommendations.<br>e recommendations.<br>e recommendations.<br>e a health hazard when processed under<br>additions of use. Although classified according to EC<br>s product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)<br>08.<br>e symptoms noted.  |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:<br>Inhalation: | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal cor<br>criteria, this<br>article 23 a<br>n°1272/200<br>No specific               | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>e recommendations.<br>e recommendations.<br>e te commendations.<br>e te commendations of use. Although classified according to EC<br>s product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)<br>08.   |
|            | Repeated Exposure<br>Label Elements:<br>Supplemental label information:<br>Other hazards:<br>Physical Hazards:<br>Health Hazards:<br>Inhalation: | Category     | EUH210: S<br>EUH066: F<br>cracking.<br>No specific<br>Surface tre<br>expected to<br>normal con<br>criteria, this<br>article 23 a<br>n°1272/200<br>No specific<br>Repeated o | prolonged or repeated exposure. (Target Organs:<br>Lung)<br>Safety data sheet available on request.<br>Repeated exposure may cause skin dryness or<br>recommendations.<br>e recommendations.<br>e recommendations.<br>e ated silica: When encapsulated in a polymer, is not<br>o pose a health hazard when processed under<br>additions of use. Although classified according to EC<br>is product is exempt from labelling according to<br>and Annex 1 (section 1.3.4.1) of regulation (CE)<br>08.<br>e symptoms noted. |

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|--|------------|---|
| Other Health Effects:  |            | No other information noted.   |
| Environmental Hazards:   |            | No hazard identified as the maximum bioavailable<br>concentration of Octamethylcyclotetrasiloxane (D4) is lower<br>than the classification cut-off value (see Section 12 of this<br>SDS).   |
| Results of PBT and vPvB as   | ssessment: | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  |
| Endocrine Disruption - Heal  | lth:       | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| Endocrine Disruption - Envi  | ironment:  | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
|  |            |   |

Other hazards:

No other information noted.

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

# 3.2 Mixtures

**General information:** 

Mixture of organosiloxanes, additives.

## Hazardous Component(s):

| Chemical name  | Concentration<br>* | Туре       | CAS-No.    | EC No.    | REACH<br>Registratio<br>n No. | Notes                |
|--|--------------------|------------|------------|-----------|-------------------------------|----------------------|
| Silanamine, 1,1,1-<br>trimethyl-N-<br>(trimethylsilyl)-,<br>hydrolysis products with<br>silica | 20 - <50%          | Component  | 68909-20-6 | 272-697-1 | Exempt                        |                      |
| octamethylcyclotetrasilo<br>xane; [D4]   | 0,01 - <0,079%     | Impurities | 556-67-2   | 209-136-7 | Not relevant.                 | #<br>##<br>PBT, vPvB |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

## This substance is listed as SVHC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

ED: Endocrine Disruptor

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#### **Classification:**

| Chemical name   | Classification  | Specific concentration<br>limit: / ATE / M-Factor: | Notes |
|---|---|--|-------|
| Silanamine, 1,1,1-trimethyl-N-<br>(trimethylsilyl)-, hydrolysis products<br>with silica | STOT RE 2 H373;<br>EUH066;                                      |  |       |
| octamethylcyclotetrasiloxane; [D4]  | Flam. Liq. 3 H226; Repr. 2<br>H361f; Aquatic Chronic 1<br>H410; | Aquatic Toxicity (Chronic):<br>10                  |       |

The full text for all H-statements is displayed in section 16.

#### Particle characteristics:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

| Assessment:    | This substance/ mixture contains nanoforms ; |
|----------------|--|
| Particle Size: | 1 - 100 nm                                   |

#### **SECTION 4: First aid measures**

| 3EC | TION 4: FIrst aid measures  |  |
|-----|---|--|
|     | General information:  | Move into fresh air and keep at rest. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.  |
| 4.1 | Description of first aid measures:<br>Inhalation:                       | In case of inhalation: Move person into fresh air and keep at<br>rest. Get medical attention immediately. If breathing is<br>difficult, trained personnel should give oxygen. If breathing<br>stops, provide artificial respiration.   |
|     | Skin Contact:   | Immediately flush with plenty of water for at least 15 minutes<br>while removing contaminated clothing and shoes. Wash skin<br>with soap and water. Get medical attention immediately.<br>Contaminated clothing to be placed in closed container until<br>disposal or decontamination. Wash contaminated clothing<br>before reuse. |
|     | Eye contact:  | In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if symptoms occur.   |
|     | Ingestion:  | Do not induce vomiting. Rinse mouth thoroughly with water.<br>Get medical attention if symptoms occur.   |
|     | Personal Protection for First-aid<br>Responders:                        | First Aid responders should pay attention to self-protection<br>and use the recommended protective clothing (chemical<br>resistant gloves, splash protection). Refer to sections 5 and 8<br>for information on emergency procedures and protective<br>equipment.   |
| 4.2 | Most important symptoms and effects, both acute and delayed:            | Any important symptoms and effects are described in Section 11 (Toxicological information) of this SDS.  |
| 4.3 | Indication of any immediate medical attentio<br>Notes to the physician: | n and special treatment needed:<br>No specific recommendations.  |

Show this Safety Data Sheet to the attending physician.

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|-------------------|---|--|
| <u>SEC</u><br>5.1 | TION 5: Firefighting measures<br>Extinguishing media<br>Suitable extinguishing media: | Water spray, foam, dry powder or carbon dioxide.   |
|                   | Unsuitable extinguishing media:   | Avoid water in straight hose stream; will scatter and spread fire.   |
| 5.2               | Special hazards arising from the substa<br>or mixture:                                | ance Product will burn under fire conditions. Thermal decomposition or combustion may liberate carbon oxides, silicon oxides and other toxic gases or vapours.   |
| 5.3               | Advice for firefighters:<br>Special protective equipment for fire-<br>fighters:       | Use standard firefighting procedures and consider the<br>hazards of other involved materials. Remove undamaged<br>containers from fire area if it is safe to do so. Evacuate to a<br>safe location and contact the emergency services. Water<br>spray should be used to cool containers.<br>Collect contaminated fire extinguishing water separately. Do<br>not allow entering drains or surface water.  |
|                   | Special protective equipment for fire-<br>fighters:                                   | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| SEC               | TION 6: Accidental release measures   |  |
| 6.1               | Personal precautions, protective equip<br>and emergency procedures:                   | <b>ment</b> Personnel not required or not equipped with personal protection should be evacuated from the area. Caution: Contaminated surfaces may be slippery. Follow safe handling advice and personal protective equipment recommendations. Avoid contact with eyes, skin, and clothing. Provide good ventilation. Avoid inhalation of vapours, mists or dusts. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Prevent further leakage or spillage if safe to do so. Alert the Health, Safety & Environmental department of spill.  |
| 6.2               | Environmental Precautions:  | Do not release into the environment. Do not discharge into drains, water courses or onto the ground. Collect spillage. Use containment for a large spill. Notify relevant authorities if this material is released to the environment.   |
| 6.3               | Methods and material for containment a cleaning up:                                   | Access to contaminated area only to authorized people.<br>Absorb with sand or other inert absorbent. Shovel up and<br>place in a container for salvage or disposal. For large spills,<br>provide dyking or other appropriate containment to keep<br>material from spreading. If dyked material can be pumped,<br>store recovered material in appropriate container. Never<br>return the spilled product to its original container for reuse.<br>Containers with collected spillage must be properly labelled<br>with correct contents and hazard symbol. Container must be<br>kept tightly closed. To clean the floor and all objects<br>contaminated by this material, use an appropriate solvent<br>(see § 9). Flush area with plenty of water. Ensure that waste<br>and contaminated materials are collected and removed from<br>the work area as soon as possible in a suitably labelled |

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|   |  |              | container. Dispose of residue in accordance with regulations in force.   |
| 6.4   | Reference to other sections:                                   |              | Please observe the important information mentioned in the other sections. In particular, information on exposure controls/personal protection and disposal considerations can be found under sections 8 and 13.  |
|   | FION 7: Handling and storage                                   |              |  |
| 7.1   | Precautions for safe handling<br>Precautions:                  | 9            | Avoid inhalation of vapours/aerosols/dusts and contact with<br>skin and eyes. Provide adequate ventilation, including<br>appropriate local extraction, to ensure that the defined<br>occupational exposure limit is not exceeded. If ventilation is<br>insufficient, suitable respiratory protection must be provided.<br>See Section 8 of the SDS for Personal Protective Equipment.<br>Provide eyewash station and safety shower and ensure that<br>their location are labelled conspicuously. Limit the quantities<br>of product in the work area to those which are necessary for<br>the work in hand. Handle in accordance with good industrial<br>hygiene and safety practices. Handle and open container with<br>care. Protect from contamination. Do not mix with<br>incompatible materials. For further information, refer to<br>section 10: "Stability and Reactivity". Take care to prevent<br>spills, waste and minimize release to the environment. In<br>case of spills, beware of slippery floors and surfaces. |
|   | Hygiene measures:  |              | Always observe good personal hygiene measures, such as<br>washing after handling the material and before eating,<br>drinking, and/or smoking. Routinely wash work clothing and<br>protective equipment to remove contaminants. Contaminated<br>work clothing should not be allowed out of the workplace.   |
| 7.2   | Conditions for safe storage,<br>including any incompatibilitie | es:          | Store in accordance with local/regional/national regulations.<br>Avoid discharge into drains, water courses or onto the<br>ground. Provide impermeable soil. Store in a dry place. Store<br>in a well-ventilated place. Keep container tightly closed. Keep<br>in properly labelled containers. Keep above the chemical's<br>freezing point. Protect against physical damage and/or<br>friction. Store away from incompatible materials. For further<br>information, refer to section 10: "Stability and Reactivity".  |
|   | Packaging frequently used a                                    | t our sites: | Polyethylene. Plastic lined steel drum.  |
|   | Lagerklasse:   |              | Es liegen keine Daten vor.   |
|   | Storage Class:   |              | No data available.   |
| 7.3   | Specific end use(s):   |              | No specific recommendations. See the technical data sheet on this product for further information.   |

# SECTION 8: Exposure controls/personal protection

8.1 Control Parameters: Occupational Exposure Limits:

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| Гуре   | Exposure                      | Limit Values | Source  | Date   | Remarks  |
|--|-------------------------------|--------------|---|--|--|
| TWA  | 10 ppm                        | 120 mg/m3    | WEEL  |  |  |
| Monitoring metho                                   | ods:                          | I            | Ensure workers' expos<br>national and Europear<br>Directives 98/24/EC a   | regulations in fo  |  |
| Exposure control<br>Appropriate engin<br>controls: |                               |              | Use engineering contr<br>permissible exposure<br>of controls necessary<br>exposure conditions. E<br>preferable to personal<br>measures to consider:<br>of inadequate ventilation<br>exhaust ventilation, or<br>airborne levels below r<br>exposure limits have n<br>levels to an acceptable<br>safety shower. | evel. The level of<br>will vary dependir<br>ingineering contro<br>protective equipm<br>Provide adequate<br>on: Use process e<br>other engineering<br>recommended ex<br>ot been establish | protection and type<br>ng upon potential<br>ols are always<br>nent. Control<br>e ventilation. In case<br>enclosures, local<br>g controls to control<br>posure limits. If<br>ed, maintain airborn |
| Individual protect<br>personal protecti            | ion measures<br>ve equipment: |              | Avoid inhalation of vap<br>skin and eyes. Person<br>chosen according to a<br>conditions of use of the<br>supplier of the persona  | al protective equi<br>pplicable standar<br>e product and in c  | pment should be<br>ds, adapted to the<br>discussion with the   |
| Eye/face protection                                | on:                           | :            | Safety Glasses with si  | de shields.  |  |
| Skin protection:<br>Hand Protection:               |                               | i            | This recommendation<br>this safety data sheet<br>indicated intended use<br>mixed with other subst<br>of CE approved protec<br>appropriate gloves.   | supplied by us, ar<br>purposes. In cas<br>ances, you need  | nd only for the<br>se this product will be<br>to contact a supplie   |
|  |                               |              | Prolonged or repeated<br>Material: Nitrile.<br>Glove thickness: 1,25<br>Guideline: EN374-3  |  |  |
|  |                               |              | Short contact:<br>Material: Nitrile / Neop<br>Glove thickness: 0,198<br>Guideline: EN374-3  |  |  |
| Skin and Body Pr                                   | otection:                     |              | Wear appropriate cloth<br>contact. Isolate contar<br>reuse. In case of splas<br>clothing.   | ninated clothing a   | ind wash before  |

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|      | Respiratory Protection:                                  |                | If engineering controls do not maintain airborne<br>concentrations below recommended exposure limits (where<br>applicable) or to an acceptable level (in countries where<br>exposure limits have not been established), an approved<br>respirator must be worn. Use the following CE approved air-<br>purifying respirator: Breathing apparatus with combined filter<br>type ABEK. Wear respiratory protection with combination filter<br>(dust and gas filter) during operations leading to the formation<br>of dust/aerosols. |
|      | Environmental Controls:                                  |                | See sections 7 and 13 of the Safety Data Sheet.   |
|      | TION 9: Physical and chemical                            | properties     |   |
| 9.1  | Information on basic physica                             | l and chemical | properties  |
|      | Appearance:<br>Physical state:                           |                | Liquid  |
|      | Form:  |                | Viscous   |
|      | Colour:  |                | White   |
|      | Odour:   |                | Odourless   |
|      | pH:  |                | By definition, pH measurement consists in the determination   |
|      |  |                | of hydrogen ions concentration in solution, generally<br>aqueous. Silicones products are hydrophobic and therefore,<br>not soluble in water. By consequence, it is not possible to  |
|      | Molting point/frooting point:                            |                | measure the pH value.<br>No data available.   |
|      | Melting point/freezing point:<br>Boiling Point:          |                | No data available.  |
|      | Flash Point:   |                | > 200 °C (Closed cup according to method ASTM D56.)   |
|      | Flammability:  |                | No data available.  |
|      | Flammability Limit - Upper (%                            | <b>6):</b>     | No data available.  |
|      | Flammability Limit - Lower (%                            | <b>6</b> ):    | No data available.  |
|      | Vapour pressure:   |                | < 0,1 hPa (20 °C)   |
|      | Relative vapour density:                                 |                | No data available.  |
|      | Evaporation Rate:  |                | No data available.  |
|      | Density:<br>Solubility(ies):                             |                | Approximate 1,05 kg/dm3 (20 °C)   |
|      | Solubility in Water:                                     |                | Practically Insoluble   |
|      | Solubility (other):                                      |                | Diethylether: Miscible (in all proportions).  |
|      | (  |                | Chlorinated solvents: Miscible (in all proportions).  |
|      |  |                | Aromatic hydrocarbons: Miscible (in all proportions).   |
|      |  |                | Aliphatic hydrocarbons: Miscible (in all proportions).  |
|      |  |                | Acetone: Very slightly soluble<br>Ethanol: Very slightly soluble  |
|      |  |                |   |
|      | Partition coefficient (n-octand                          | ol/water):     | No data available.  |
|      | Self Ignition Temperature:<br>Decomposition Temperature: |                | > 400 °C<br>> 200 °C  |
|      | Kinematic viscosity:                                     |                | Approximate 4 800 mm2/s (20 °C)   |
|      | Particle characteristics:                                |                | Not applicable.   |
| 0.0  | Other information.                                       |                |   |
| 9.2  | Other information:<br>Dynamic viscosity:                 |                | Approximate 5 000 mPa.s   |
|      | Oxidizing properties:                                    |                | According to the data on the components   |
|      | exisizing properties.                                    |                | Not considered as oxidizing.  |
|      |  |                | (evaluation by structure-activity relationship)   |
|      |  |                |   |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|     | TION 10: Stability and reactivity   |  |
|-----|---|--|
| 0.1 | Reactivity:   | Not relevant.  |
| 0.2 | Chemical Stability:   | Material is stable under normal conditions.  |
| 0.3 | Possibility of hazardous Reactions:   | No data available.   |
| 0.4 | Conditions to Avoid:  | No special precautions.  |
| 0.5 | Incompatible Materials:   | Strong oxidizing agents.   |
| 0.6 | Hazardous Decomposition<br>Products:  | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Amorphous silica.   |
|     | TION 11: Toxicological information  |  |
| 1.1 | Information on hazard classes as defined i<br>Acute Toxicity:                                   | n Regulation (EC) No 1272/2008:  |
|     | Oral:   | Not classified for acute toxicity based on available data.   |
|     | Dermal:   | Not classified for acute toxicity based on available data.   |
|     | Inhalation:   | Not classified for acute toxicity based on available data.   |
|     | Repeated Dose Toxicity:<br>Based on our knowledge of the<br>composition information:            | Based on our knowledge of the composition information:<br>OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOAEL: 1,82 mg/l ; LOAEL: 8,5 mg/l ; (Rat ; Female, Male ;<br>Inhalation - vapour) ; Target Organ(s): Kidney ; Method:<br>Similar to OECD 453 ; Chronic exposure.<br>NOAEL: 960 mg/kg ; (Rabbit ; Female, Male ; Dermal) ; No<br>treatment-related adverse effects observed ; Method: Simila<br>to OECD 410 ; Subacute exposure. |
|     | Skin Corrosion/Irritation:<br>Based on our knowledge of the<br>composition information:         | SILANAMINE, 1,1,1-TRIMETHYL-N-(TRIMETHYLSILYL)-,<br>HYDROLYSIS PRODUCTS WITH SILICA (68909-20-6):<br>Repeated exposure may cause skin dryness or cracking.<br>OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>An Expert Judgment stated that no classification is necessar<br>based on present knowledge. Not irritating (Rabbit) ; Method<br>Similar to OECD 404  |
|     | Serious Eye Damage/Eye Irritation:<br>Based on our knowledge of the<br>composition information: | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>An Expert Judgment stated that no classification is necessa<br>based on present knowledge. Not irritating (Rabbit) ; Method<br>OECD 405  |
|     | Respiratory or Skin Sensitisation:<br>Based on our knowledge of the<br>composition information: | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Skin sensitization: Not a skin sensitizer. (Guinea Pig) ;<br>Method: OECD 406  |
|     | Germ Cell Mutagenicity:<br>In vitro: Based on our knowledge of the<br>composition information:  | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):   |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|--|-----------------|---|
|  |                 | Bacterial reverse mutation test: No mutagenic effect.<br>(Salmonella typhimurium ; with and without metabolic<br>activation) ; Method: OECD 471<br>In vitro gene mutations test on mammalian cells: No<br>mutagenic effect. (Mouse lymphoma cells ; with and without<br>metabolic activation) ; Method: Similar to OECD 476<br>In vitro mammalian chromosomal aberration test: No<br>clastogenic effect. (Chinese hamster ovary cells ; with and<br>without metabolic activation) ; Method: Similar to OECD 473 |
| In vivo: Based on our know<br>composition information:   | ledge of the    | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Mammalian bone marrow chromosomal aberration test:<br>negative (Rat ; Female, Male ; Inhalation) ; Method: Similar to<br>OECD 475<br>Rodent dominant Lethal test: negative (Rat ; Female, Male ;<br>Gavage (Oral)) ; Method: Similar to OECD 478  |
| Carcinogenicity:<br>Based on our knowledge of<br>composition information:  | the             | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Not classified<br>No effects expected. NOAEC: >= 8,492 mg/l (Rat ; Female,<br>Male ; Inhalation - vapour) ; Method: Similar to OECD 453 ;<br>Chronic exposure.  |
| Reproductive Toxicity:<br>Fertility: Based on our knov<br>composition information:   | vledge of the   | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Suspected of damaging fertility.<br>Fertility study 2 generations: NOAEL (parent): 3,64 mg/l ;<br>NOAEL (F1): 3,64 mg/l ; NOAEL (F2): None. (Rat ; Female,<br>Male ; Inhalation) ; Method: Similar to OECD 416 ; Effects on<br>fertility  |
| Teratogenicity: Based on ou<br>the composition information   | -               | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOAEL (terato): > 8,492 mg/l; NOAEL (mater): 3,64 mg/l<br>(Rat; Inhalation - vapour); Method: Similar to OECD 414;<br>The product is not considered to be toxic for development.<br>NOAEL (terato): > 6,066 mg/l; NOAEL (mater): 3,64 mg/l<br>(Rabbit; Inhalation - vapour); Method: Similar to OECD 414;<br>The product is not considered to be toxic for development.   |
| Specific Target Organ Toxic<br>Based on our knowledge of<br>composition information:   |                 | sure:<br>OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Based on available data, the classification criteria are not<br>met.   |
| Specific Target Organ Toxic<br>Based on our knowledge of<br>composition information: M<br>damage to organs through<br>repeated exposure. | the<br>ay cause | <b>Kposure:</b><br>SILANAMINE, 1,1,1-TRIMETHYL-N-(TRIMETHYLSILYL)-,<br>HYDROLYSIS PRODUCTS WITH SILICA (68909-20-6):<br>Causes damage to organs through prolonged or repeated<br>exposure. Inhalation: Target Organ(s): Lungs   |
|  |                 | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Based on available data, the classification criteria are not<br>met.  |

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According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



Page 10 of 14 Revision Date: 06.10.2023 Supersedes Date: 25.11.2022 Version: 9.0 Printing date: 21.01.2022 Hinrisil KL - component A **Aspiration Hazard:** Based on our knowledge of the OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): composition information: Based on available data, the classification criteria are not met. 11.2 Information on other hazards: Endocrine disrupting properties: No data available. **SECTION 12: Ecological information** General information: The maximum concentration of Octamethylcyclotetrasiloxane (D4) leachable from the product is below the established noeffect threshold (<0.0079 mg/l) for aquatic organisms. 12.1 Toxicity: Acute toxicity: Fish: Based on our knowledge of the OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): composition information: LC 50 (Oncorhynchus mykiss; 96 h; Flow through) : > 0,022 mg/l; Method: According to a standardised method. Aquatic Invertebrates: Based on our OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): knowledge of the composition information: EC 50 (Water flea (Daphnia magna); 48 h ; Flow through) : > 0,015 mg/l; Method: According to a standardised method. OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): Aquatic plants: Based on our knowledge of the composition information: ErC50 (Algae (Pseudokirchneriella subcapitata); 96 h) : > 0,022 mg/l; Method: According to a standardised method. ErC10 (Algae (Pseudokirchneriella subcapitata); 96 h) : >= 0,022 mg/l; Method: According to a standardised method. OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): Toxicity to microorganisms: Based on our knowledge of the composition information: EC 50 (3 h) : > 10 000 mg/l **Chronic Toxicity:** Fish: Based on our knowledge of the OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): composition information: NOEC (Oncorhynchus mykiss; 93 d; Flow through) : >= 0,0044 mg/l; Method: According to a standardised method. Aquatic Invertebrates: Based on our OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): knowledge of the composition information: NOEC (Water flea (Daphnia magna); 21 d; Flow through) : >= 0,015 mg/l; Method: According to a standardised method. 12.2 Persistence and Degradability: Biodegradation: Based on our knowledge OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): of the composition information: 3,7 % (activated sludge and sewage, soil ; 28 d) ; Method: OECD 310 ; The product is not considered to be readily biodegradable. **BOD/COD** Ratio: No data available. 12.3 Bioaccumulative Potential: **Bioconcentration Factor (BCF):Based on** OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): our knowledge of the composition Bioconcentration Factor (BCF): 14 900 (Fathead Minnow); Method: OECD 305 ; Not bioaccumulable based on the information: depuration rate constant

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|---|--|
| Partition coefficient (n-octanol/water):<br>Based on our knowledge of the<br>composition information: | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Log Kow: 5,10  |
| 12.4 Mobility in Soil:  | No data available.   |
| 12.5 Results of PBT and vPvB assessment:<br>Based on our knowledge of the<br>composition information: | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Meets PBT (persistent/bioaccumulative/toxic) criteria.<br>(REACH (1907/2006) Ax XIII)<br>Meets vPvB criteria (REACH (1907/2006) Ax XIII)   |
| 12.6 Endocrine disrupting properties:   | No data available.   |
| 12.7 Other adverse effects:   | No data available.   |
| SECTION 13: Disposal considerations   |  |
| 13.1 Waste treatment methods  | Do not empty into drains. The user's attention is drawn to the<br>possible existence of local regulations regarding disposal.<br>Please observe the important information mentioned in the<br>other sections. In particular, information on hazards<br>identification and product stability and reactivity under<br>sections 2 and 10. |
| Disposal methods:   | Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate in suitable combustion chamber.   |
| Contaminated Packaging:   | Contaminated packages should be as empty as possible.<br>Recycle following cleaning or dispose of at an authorised site.<br>Packaging that cannot be cleaned should be disposed of in<br>the same way as the product it contained.   |
| Waste code:   | The waste code of the European Waste Catalogue (EWC) cannot be determined for this product, as its determination depends on how the material is used by the end-users. The waste code has to be determined within the EU in agreement with the waste-disposal operator.  |
| SECTION 14: Transport information   |  |
| ADR:  | Not regulated.   |
| ADN:  | Not regulated.   |
| RID:  | Not regulated.   |
| IMDG / IMO  | Not regulated.   |
| IATA:   | Not regulated.   |
| SECTION 15: Regulatory information  |  |

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulations:

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|---|---|
| Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:                     | None present or none present in regulated quantities. |
| Regulation 1005/2009/EC on substances<br>that deplete the ozone layer, Annex II, New<br>Substances:                     | None present or none present in regulated quantities. |
| EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended:                               | None present or none present in regulated quantities. |
| Regulation (EU) No. 649/2012 concerning<br>the export and import of dangerous<br>chemicals, Annex I, Part 1 as amended: | None present or none present in regulated quantities. |
| Regulation (EU) No. 649/2012 concerning<br>the export and import of dangerous<br>chemicals, Annex I, Part 2 as amended: | None present or none present in regulated quantities. |
| Regulation (EU) No. 649/2012 concerning<br>the export and import of dangerous<br>chemicals, Annex I, Part 3 as amended: | None present or none present in regulated quantities. |
| Regulation (EU) No. 649/2012 concerning<br>the export and import of dangerous<br>chemicals, Annex V as amended:         | None present or none present in regulated quantities. |

EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17:

| Chemical name                      | CAS-No.  |
|------------------------------------|----------|
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 |

**EU. REACH Annex XIV, Substances Subject** None present or none present in regulated quantities. **to Authorization:** 

#### EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

| Chemical name                      | CAS-No.  | Concentration | Additional Information   |
|------------------------------------|----------|---------------|--|
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 0,01 - 0,079% | very Persistent and very<br>Bioaccumulative (vPvB)Persistent,<br>Bioaccumulative and Toxic (PBT) |

#### Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

| Chemical name                      | CAS-No.  | Entry No: | Concentration: |
|------------------------------------|----------|-----------|----------------|
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 70        | 0,01 - 0,079%  |

#### Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

| Chemical name                      | CAS-No.  | Concentration |
|------------------------------------|----------|---------------|
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 0,01 - 0,079% |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



Revision Date: 06.10.2023 Page 13 of 14 Supersedes Date: 25.11.2022 Version: 9.0 Printing date: 21.01.2022 Hinrisil KL - component A EU. Regulation No. 166/2006 PRTR None present or none present in regulated quantities. (Pollutant Release and Transfer Registry), Annex II: Pollutants: EU. Directive 2012/18/EU (SEVESO III) on Not applicable major accident hazards involving dangerous substances, Annex I: National Regulations: Wassergefährdungs-klasse (WGK): WGK 1: schwach wassergefährdend. Einstufung nach AwSV Water Hazard Class (WGK): WGK 1: slightly water-endangering. Classification according to AwSV 15.2 Chemical safety assessment: Surface treated silica: When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use. For safe use information, please refer to section 8 of this SDS. **Inventory Status:** Australia Industrial Chem. Act (AIIC): On or in compliance with the inventory. On or in compliance with the inventory. Canada DSL Inventory List: China Inv. Existing Chemical Substances: On or in compliance with the inventory. Japan (ENCS) List: Q (quantity restricted) On or in compliance with the inventory. Korea Existing Chemicals Inv. (KECI): New Zealand Inventory of Chemicals: On or in compliance with the inventory. **Philippines PICCS:** On or in compliance with the inventory. Taiwan Chemical Substance Inventory: On or in compliance with the inventory. US TSCA Inventory: On or in compliance with the inventory. Thailand DIW Existing Chemical Inv. List: On or in compliance with the inventory. Vietnam National Chemical Inventory: On or in compliance with the inventory. EINECS, ELINCS or NLP: On or in compliance with the inventory. **SECTION 16: Other information Revision Information:** SECTION 2: Modification: Hazard(s) identification Composition/information on ingredients SECTION 3: Modification: SECTION 15: Modification: Regulatory information

#### Abbreviations and acronyms:

| CLP:   | Regulation No. 1272/2008.  |
|--------|--|
| PBT:   | persistent, bioaccumulative and toxic substance.                       |
| vPvB:  | very persistent and very bioaccumulative substance.                    |
| NOAEL: | No Observable Adverse Effect Level                                     |
| LOAEL: | Lowest Observable Adverse Effect Level                                 |
| ED:    | Endocrine Disruptor  |
| SVHC:  | Listed on the Candidate List of substances of very high concern (SVHC) |
|        |  |

#### Wording of the H-statements in section 2 and 3:

| moraling of the fi |  |
|--------------------|--|
| EUH066             | Repeated exposure may cause skin dryness or cracking.              |
| EUH210             | Safety data sheet available on request.                            |
| H226               | Flammable liquid and vapour.                                       |
| H361f              | Suspected of damaging fertility.                                   |
| H373               | May cause damage to organs through prolonged or repeated exposure. |
| H410               | Very toxic to aquatic life with long lasting effects.              |
|                    |  |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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#### Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment



Ingestion:

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



Revision Date: 09.10.2023 Version: 8.0 Page 1 of 18 Supersedes Date: 04.12.2022 Printing date: 24.01.2019 Hinrisil KL - component B SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier: Commercial product name: Hinrisil KL - component B Duplicating silicone This substance/ mixture contains nanoforms 1.2 Relevant identified uses of the substance or mixture and uses advised against: Identified uses: Moulding diverse objects. None known. Uses advised against: 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: ERNST HINRICHS Dental GmbH Street / mailbox: Borsigstr. 1 D - 38644 Goslar Country code. / postal code / city: Phone: 0 53 21 / 5 06 24 0 53 21 / 5 08 81 Fax: E-mail / Website: info@hinrichs-dental.de / www.hinrichs-dental.de ERNST HINRICHS Dental GmbH Further information obtainable from: 1.4 **Emergency telephone number ERNST HINRICHS Dental GmbH:** +49 (0) 53 21 / 5 06 24 (Mon-Fri. 8 a.m. – 4 p.m.) **SECTION 2: Hazards identification** 2.1. Classification of the substance or mixture: The product has been classified according to the legislation in force. Classification according to Regulation (EC) No 1272/2008 as amended. **Health Hazards:** Specific Target Organ Toxicity -Category 2 H373: May cause damage to organs through **Repeated Exposure** prolonged or repeated exposure. (Target Organs: Lung) 2.2 Label Elements: Supplemental label information: EUH210: Safety data sheet available on request. EUH066: Repeated exposure may cause skin dryness or cracking. 2.3 Other hazards: **Physical Hazards:** No specific recommendations. **Health Hazards:** Inhalation: Surface treated silica: When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use. Although classified according to EC criteria, this product is exempt from labelling according to article 23 and Annex 1 (section 1.3.4.1) of regulation (CE) n°1272/2008. Eye contact: No specific symptoms noted. Skin Contact: Repeated exposure may cause skin dryness or cracking.

No specific symptoms noted.

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|---|--------------|---|
| Other Health Effects:   |              | No other information noted.   |
| Environmental hazards:  |              | No hazard identified as the maximum bioavailable<br>concentration of Octamethylcyclotetrasiloxane (D4) is lower<br>than the classification cut-off value (see Section 12 of this<br>SDS).   |
| Results of PBT and vPvB assessment:   |              | This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).   |
| Endocrine Disruption -<br>Health:   |              | The substance/mixture does not contain components<br>considered to have endocrine disrupting properties<br>according to REACH Article 57(f) or Commission Delegated<br>regulation (EU) 2017/2100 or Commission<br>Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| Endocrine Disruption -<br>Environment:  |              | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.             |
| Other hazards:  |              | Chemical compounds containing silicon - hydrogen bonds (SiH). This product may generate hydrogen gas. For further information, refer to section 10: "Stability and Reactivity".   |

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

#### 3.2 Mixtures General information:

Mixture of organosiloxanes, additives.

## Hazardous Component(s):

| Chemical name   | Concentration* | Туре       | CAS-No.        | EC No.    | REACH<br>Registration<br>No. | Notes      |
|---|----------------|------------|----------------|-----------|------------------------------|------------|
| Silanamine, 1,1,1-trimethyl-<br>N-(trimethylsilyl)-, hydrolysis<br>products with silica | 20 - <50%      | Component  | 68909-<br>20-6 | 272-697-1 | Exempt                       |            |
| Dodecamethylcyclohexasilo xane  | 0,1 - <1%      | Impurities | 540-97-6       | 208-762-8 | Not relevant.                | ##<br>vPvB |
| Decamethylcyclopentasiloxa ne   | 0,1 - <1%      | Impurities | 541-02-6       | 208-764-9 | Not relevant.                | ##<br>vPvB |
|   |                |            |                |           |                              |            |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

## This substance is listed as SVHC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

ED: Endocrine Disruptor

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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#### Classification

| Chemical name   | Classification  | Specific concentration limit:<br>/ ATE /<br>M-Factor: | Notes |
|---|---|---|-------|
| Silanamine, 1,1,1-trimethyl-N-<br>(trimethylsilyl)-, hydrolysis products<br>with silica | STOT RE 2 H373;<br>EUH066;                                      |   |       |
| Dodecamethylcyclohexasiloxane   | None known.   |   |       |
| Decamethylcyclopentasiloxane  | None known.   |   |       |
| octamethylcyclotetrasiloxane; [D4]  | Flam. Liq. 3 H226; Repr. 2<br>H361f; Aquatic Chronic 1<br>H410; | Aquatic Toxicity (Chronic): 10                        |       |

The full text for all H-statements is displayed in section 16.

#### Particle characteristics:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

| Assessment:    | This substance/ mixture contains nanoforms ; |
|----------------|--|
| Particle Size: | 1 - 100 nm                                   |
|                |  |

#### **SECTION 4: First aid measures**

| SEC | TION 4: FIrst aid measures                                   |  |
|-----|--|--|
|     | General information:   | Move into fresh air and keep at rest. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.  |
| 4.1 | Description of first aid measures:<br>Inhalation:            | In case of inhalation: Move person into fresh air and keep at<br>rest. Get medical attention immediately. If breathing is<br>difficult, trained personnel should give oxygen. If breathing<br>stops, provide artificial respiration.   |
|     | Skin Contact:  | Immediately flush with plenty of water for at least 15 minutes<br>while removing contaminated clothing and shoes. Wash skin<br>with soap and water. Get medical attention immediately.<br>Contaminated clothing to be placed in closed container until<br>disposal or decontamination. Wash contaminated clothing<br>before reuse. |
|     | Eye contact:   | In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if symptoms occur.   |
|     | Ingestion:   | Do not induce vomiting. Rinse mouth thoroughly with water.<br>Get medical attention if symptoms occur.   |
|     | Personal Protection for First-aid<br>Responders:             | First Aid responders should pay attention to self-protection<br>and use the recommended protective clothing (chemical<br>resistant gloves, splash protection). Refer to sections 5 and<br>8 for information on emergency procedures and protective<br>equipment.   |
| 4.2 | Most important symptoms and effects, both acute and delayed: | Any important symptoms and effects are described in Section 11 (Toxicological information) of this SDS.  |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



Revision Date: 09.10.2023 Version: 8.0 Page 4 of 18 Supersedes Date: 04.12.2022 Printing date: 24.01.2019 Hinrisil KL - component B 4.3 Indication of any immediate medical attention and special treatment needed: Notes to the physician: No specific recommendations. Show this Safety Data Sheet to the attending physician. **SECTION 5: Firefighting measures** 5.1 **Extinguishing media** Suitable extinguishing media: Alcohol resistant foam. Carbon dioxide (CO2). Dry sand. Water spray. Unsuitable extinguishing Alkaline powders. Do not use water jet as an extinguisher, as media: this will spread the fire. For further information, refer to section 10: "Stability and Reactivity". 5.2 Special hazards arising from the substance Product will burn under fire conditions. This product may or mixture: generate hydrogen gas. Vapours may form explosive mixtures with air. For further information, refer to section 10: "Stability and Reactivity". Thermal decomposition or combustion may liberate carbon oxides, silicon oxides and other toxic gases or vapours. 5.3 Use standard firefighting procedures and consider the Advice for firefighters: Special firefighting procedures: hazards of other involved materials. Remove undamaged containers from fire area if it is safe to do so. Evacuate to a safe location and contact the emergency services. Water spray should be used to cool containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Special protective equipment for fire-Self-contained breathing apparatus and full protective clothing must be worn in case of fire. fighters: **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment Personnel not required or not equipped with personal and emergency procedures: protection should be evacuated from the area. Caution: Contaminated surfaces may be slippery. Follow safe handling advice and personal protective equipment recommendations. Avoid contact with eyes, skin, and clothing. Provide good ventilation. Avoid inhalation of vapours, mists or dusts. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all possible sources of ignition in the surrounding area. Avoid sparks, flames, heat and smoking. Keep away from Alkalis and caustic products. Prevent further leakage or spillage if safe to do so. Alert the Health, Safety & Environmental department of spill. 6.2 **Environmental Precautions:** Do not release into the environment. Do not discharge into drains, water courses or onto the ground. Collect spillage. Use containment for a large spill. Notify relevant authorities if this material is released to the environment. 6.3 Methods and material for containment and Access to contaminated area only to authorized people. cleaning up: Absorb with sand or other inert absorbent. Shovel up and place in a container for salvage or disposal. Materials in

contact with water, moisture, acids or bases have the

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|   |   |              | potential to generate hydrogen gas. Use clean non-sparking<br>tools to collect absorbed material. For large spills, provide<br>dyking or other appropriate containment to keep material<br>from spreading. If dyked material can be pumped, store<br>recovered material in appropriate container. Recovered<br>material should be stored in a vented container. Never return<br>the spilled product to its original container for reuse.<br>Containers with collected spillage must be properly labelled<br>with correct contents and hazard symbol. Container must be<br>kept tightly closed. To clean the floor and all objects<br>contaminated by this material, use an appropriate solvent<br>(see § 9). Flush area with plenty of water. Ensure that waste<br>and contaminated materials are collected and removed from<br>the work area as soon as possible in a suitably labelled<br>container. Dispose of residue in accordance with regulations<br>in force.  |  |  |
| 6.4   | Reference to other sections:                  |              | Please observe the important information mentioned in the<br>other sections. In particular, information on exposure<br>controls/personal protection and disposal considerations can<br>be found under sections 8 and 13.   |  |  |
|   | TION 7: Handling and storage                  |              |  |  |  |
| 7.1   | Precautions for safe handling<br>Precautions: |              | This product may generate hydrogen gas. Keep away from<br>ignition source. Empty container after use should be stored<br>in separate area, and be disposed after degassing<br>completely. Take precautionary measures against static<br>discharges. Provide adequate precautions, such as electrical<br>grounding and bonding, or inert atmospheres. Read and<br>follow manufacturer's recommendations. Avoid inhalation of<br>vapours/aerosols/dusts and contact with skin and eyes. Use<br>mechanical ventilation in case of handling which causes<br>formation of vapours. If ventilation is insufficient, suitable<br>respiratory protection must be provided. See Section 8 of the<br>SDS for Personal Protective Equipment. Provide eyewash<br>station and safety shower and ensure that their location are<br>labelled conspicuously. Limit the quantities of product in the<br>work area to those which are necessary for the work in hand.<br>Handle in accordance with good industrial hygiene and<br>safety practices. Handle and open container with care.<br>Protect from contamination. Do not mix with incompatible<br>materials. For further information, refer to section 10:<br>"Stability and Reactivity". Take care to prevent spills, waste<br>and minimize release to the environment. In case of spills,<br>beware of slippery floors and surfaces. |  |  |
|   | Hygiene measures:                             |              | Always observe good personal hygiene measures, such as<br>washing after handling the material and before eating,<br>drinking, and/or smoking. Routinely wash work clothing and<br>protective equipment to remove contaminants. Contaminated<br>work clothing should not be allowed out of the workplace.   |  |  |
| 7.2   | Conditions for safe storage,                  |              | Store in accordance with local/regional/national regulations.  |  |  |

.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local/regional/national regulations. Avoid discharge into drains, water courses or onto the

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Remarks

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|   |                   | ground. Provide impermeable soil. Store in a cool, dry place<br>with adequate ventilation. Keep away from incompatible<br>materials, open flames, and high temperatures. For further<br>information, refer to section 10: "Stability and Reactivity".<br>Store in original tightly closed container, equipped with a<br>degassing device. Product may evolve minute quantities of<br>flammable hydrogen gas which can accumulate. Adequately<br>ventilate to maintain vapours well below flammability limits<br>and exposure guidelines. Do not repackage. Clogged<br>container vents may increase pressure build up. Keep in<br>properly labelled containers. Keep above the chemical's<br>freezing point. Protect against physical damage and/or<br>friction. |
| Packaging frequently u  | sed at our sites: | Polyethylene. Steel drums coated with epoxy-resin.  |
| Lagerklasse:  |                   | Es liegen keine Daten vor.  |
| Storage Class:  |                   | No data available.  |
| 7.3 Specific end use(s):  |                   | No specific recommendations. See the technical data sheet on this product for further information.  |

# SECTION 8: Exposure controls/personal protection

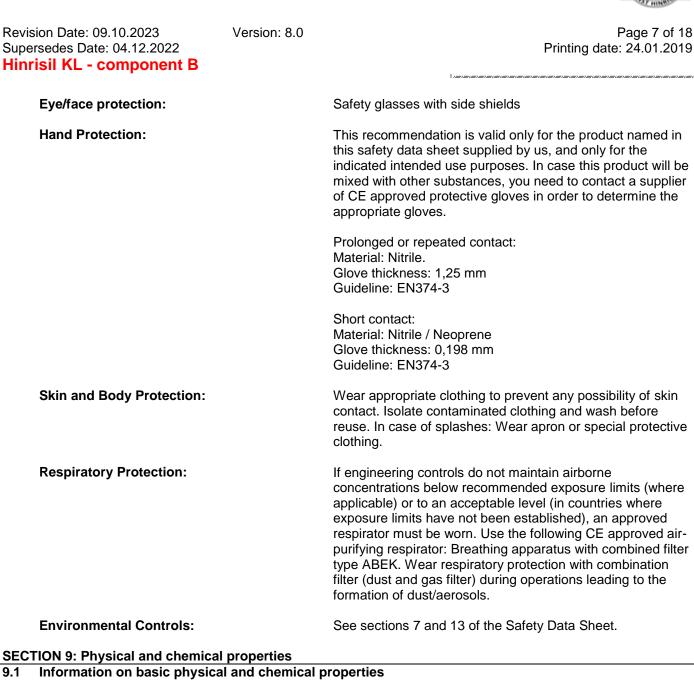
#### 8.1 Control Parameters: Occupational Exposure Limits:

| octamethylcyclotetrasiloxane; [D4] |                       |           |        |      |  |  |
|------------------------------------|-----------------------|-----------|--------|------|--|--|
| Туре                               | Exposure Limit Values |           | Source | Date |  |  |
| TWA                                | 10 ppm                | 120 mg/m3 | WEEL   |      |  |  |

|     | TWA   | 10 ppm | 120 mg/m3 |   | WEEL   |  |   |
|-----|---|--------|-----------|---|--|--|---|
|     | Monitoring method                                     | S:     |           | nati  | ure workers' exposure mon<br>onal and European regulatio<br>ectives 98/24/EC and 2004/3  | ons in force, in p   |   |
| 8.2 | Exposure controls:<br>Appropriate engine<br>controls: |        |           | perro<br>of c<br>exp<br>pred<br>of ir<br>exh<br>airb<br>exp<br>leve | e engineering controls to red<br>missible exposure level. The<br>ontrols necessary will vary o<br>osure conditions. Engineerin<br>erable to personal protectiv<br>asures to consider: Provide<br>nadequate ventilation: Use p<br>aust ventilation, or other eng<br>orne levels below recomme<br>osure limits have not been e<br>els to an acceptable level. Pl | e level of protecti<br>depending upon<br>ng controls are a<br>e equipment. Co<br>adequate ventila<br>process enclosur<br>gineering control<br>nded exposure I<br>established, main | on and types<br>potential<br>lways<br>ontrol<br>tion. In case<br>es, local<br>s to control<br>imits. If<br>ntain airborne |
|     | Individual protectio<br>personal protective           |        | such as   | skir<br>cho   | id inhalation of vapours/aer<br>a and eyes. Personal protect<br>sen according to applicable<br>ditions of use of the product   | tive equipment s standards, adap   | hould be<br>oted to the   |

supplier of the personal protective equipment.

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



# 9.1

| information on basic physical and one | normation on Sasie physical and onemoal properties   |  |  |  |  |
|---------------------------------------|--|--|--|--|--|
| Physical state:                       | Liquid   |  |  |  |  |
| Form:                                 | Viscous  |  |  |  |  |
| Colour:                               | Pink   |  |  |  |  |
| Odour:                                | Odourless  |  |  |  |  |
| pH:                                   | By definition, pH measurement consists in the determination<br>of hydrogen ions concentration in solution, generally<br>aqueous. Silicones products are hydrophobic and therefore,<br>not soluble in water. By consequence, it is not possible to<br>measure the pH value. |  |  |  |  |
| Melting point/freezing point:         | No data available.   |  |  |  |  |
| Boiling Point:                        | No data available.   |  |  |  |  |
| Flash Point:                          | > 200 °C (Closed cup according to method ASTM D56.)  |  |  |  |  |
| Flammability:                         | No data available.   |  |  |  |  |
| Flammability Limit - Upper (%):       | 74 %(V) Hydrogen.  |  |  |  |  |
| Flammability Limit - Lower (%):       | 4 %(V) Hydrogen.   |  |  |  |  |
| Vapour pressure:                      | < 0,1 hPa (20 °C)  |  |  |  |  |



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|      | Relative vapour density:<br>Evaporation Rate:<br>Density:<br>Solubility(ies):<br>Solubility in Water:<br>Solubility (other):                      |                 | No data available.<br>No data available.<br>Approximate 1,05 kg/dm3 (20 °C)<br>Practically Insoluble<br>Diethylether: Miscible (in all proportions).<br>Aliphatic hydrocarbons: Miscible (in all proportions).<br>Aromatic hydrocarbons: Miscible (in all proportions).<br>Chlorinated solvents: Miscible (in all proportions).<br>Acetone: Very slightly soluble |
|      | Partition coefficient (n-octanol<br>Self Ignition Temperature:<br>Decomposition Temperature:<br>Kinematic viscosity:<br>Particle characteristics: | /water):        | Ethanol: Very slightly soluble<br>No data available.<br>500 °C Hydrogen.<br>> 200 °C<br>Approximate 5 000 mm2/s (20 °C)<br>Not applicable.  |
| 9.2  | Other information:<br>Dynamic viscosity:<br>Oxidizing properties:   |                 | Approximate 4 000 mPa.s<br>According to the data on the components<br>Not considered as oxidizing.<br>(evaluation by structure-activity relationship)   |
|      | TION 10: Stability and reactivity   |                 |   |
| 10.1 | Reactivity:   |                 | No other information noted.   |
| 10.2 | Chemical Stability:   |                 | Material is stable under normal conditions.   |
| 10.3 | Possibility of hazardous reaction   | ons:            | This product may generate hydrogen gas.   |
| 10.4 | Conditions to avoid:  |                 | No other information noted.   |
| 10.5 | Incompatible Materials:   |                 | A fire or explosion hazard arises because highly flammable<br>gas (hydrogen) is released when it is in contact with: Strong<br>oxidizing agents. Alkalis and caustic products. Chemical<br>compounds with mobile hydrogen, in the presence of metal<br>salts and complexes.   |
| 10.6 | Hazardous Decomposition Pro   | ducts:          | Thermal decomposition or combustion may liberate carbon<br>oxides and other toxic gases or vapours. Amorphous silica.<br>Quantity of hydrogen potentially released (l/kg of product):<br><7   |
| SECT | ION 11: Toxicological informati   | on              |   |
| 11.1 | Information on hazard classes   | as defined in R | legulation (EC) No 1272/2008:   |
|      | Acute Toxicity:<br>Oral:  |                 | Not classified for acute toxicity based on available data.  |
|      | Dermal:   |                 | Not classified for acute toxicity based on available data.  |
|      | Inhalation:   |                 | Not classified for acute toxicity based on available data.  |
|      | Repeated dose toxicity:<br>Based on our knowledge of the<br>information:  | e composition   | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):   |



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|   |                | NOAEL: 1 000 mg/kg ; (Rat ; Female, Male ; Oral) ; Method:<br>OECD 422 ; Subacute exposure.<br>NOAEL: 0,0182 mg/l ; (Rat ; Female, Male ; Inhalation -<br>vapour) ; Method: OECD 413 ; Subchronic exposure.<br>DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>An Expert Judgment stated that no classification is<br>necessary based on present knowledge. NOAEL: 1 000<br>mg/kg ; (Rat ; Female, Male ; 90 d ; Oral) ; No treatment-<br>related adverse effects observed ; Method: OECD 408<br>NOAEL: 2,42 mg/l ; (Rat ; Female, Male ; 2 yr ; Inhalation -<br>vapour) ; No treatment-related adverse effects observed ;<br>Method: OECD 453<br>NOAEL: 1 600 mg/kg ; (Rat ; Female, Male ; 28 d ; Dermal) ;<br>No treatment-related adverse effects observed ; Method:<br>OECD 410 |
|   |                | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOAEL: 1,82 mg/l ; LOAEL: 8,5 mg/l ; (Rat ; Female, Male ;<br>Inhalation - vapour) ; Target Organ(s): Kidney ; Method:<br>Similar to OECD 453 ; Chronic exposure.<br>NOAEL: 960 mg/kg ; (Rabbit ; Female, Male ; Dermal) ; No<br>treatment-related adverse effects observed ; Method: Similar<br>to OECD 410 ; Subacute exposure.  |
| Skin Corrosion/Irritation:<br>Based on our knowledge of t<br>information:             | he composition | SILANAMINE, 1,1,1-TRIMETHYL-N-(TRIMETHYLSILYL)-,<br>HYDROLYSIS PRODUCTS WITH SILICA (68909-20-6):<br>Repeated exposure may cause skin dryness or cracking.   |
|   |                | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Not irritating (Rabbit) ; Method: OECD 404  |
|   |                | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Not Classified Not irritating (Rabbit ; 24 h) ; Method: OECD<br>404  |
|   |                | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>An Expert Judgment stated that no classification is<br>necessary based on present knowledge. Not irritating<br>(Rabbit) ; Method: Similar to OECD 404  |
| Serious Eye Damage/Eye Irri<br>Based on our knowledge of t<br>information:            |                | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Not irritating (Rabbit) ; Method: OECD 405  |
|   |                | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Not Classified Not irritating (Rabbit) ; Method: OECD 405  |
|   |                | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>An Expert Judgment stated that no classification is<br>necessary based on present knowledge. Not irritating<br>(Rabbit) ; Method: OECD 405   |

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> Respiratory or Skin Sensitization: Based on our knowledge of the composition information:

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6): Skin sensitization: Not a skin sensitizer. (Guinea Pig) ; Method: OECD 406

DECAMETHYLCYCLOPENTASILOXANE (541-02-6): Skin sensitization: Not a skin sensitizer. ; Not a skin sensitizer. (Mouse) ; Method: OECD 429

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): Skin sensitization: Not a skin sensitizer. (Guinea Pig) ; Method: OECD 406

Germ Cell Mutagenicity: In vitro: Based on our knowledge of the composition information:

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6): Bacterial reverse mutation test: No mutagenic effect. (Salmonella typhimurium and Escherichia coli ; with and without metabolic activation) ; Method: OECD 471 In vitro gene mutations test on mammalian cells: No mutagenic effect. (Mouse lymphoma cells ; with and without metabolic activation) ; Method: OECD 476

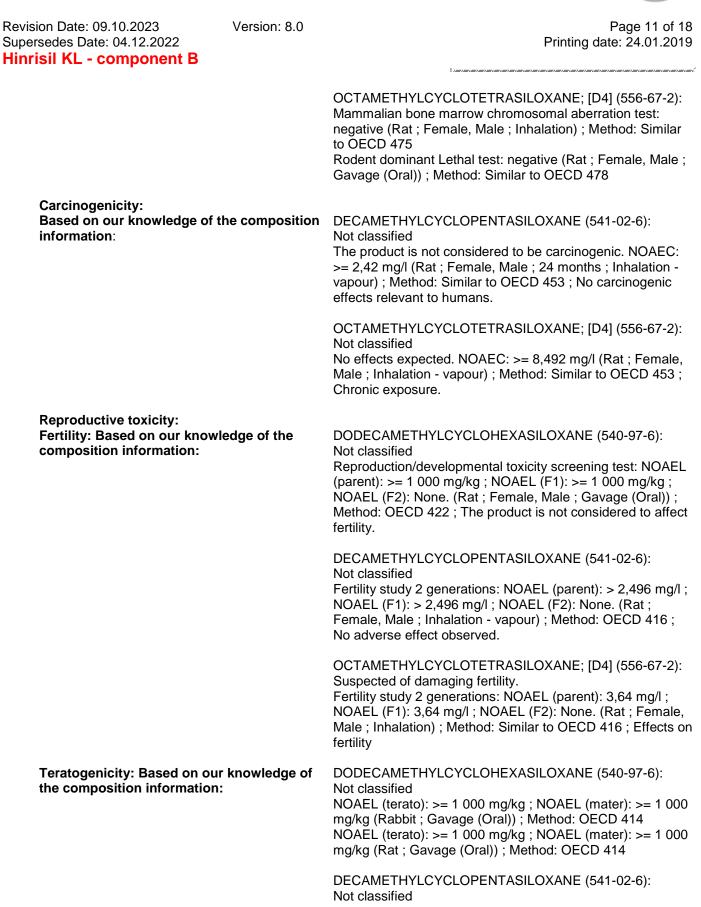
DECAMETHYLCYCLOPENTASILOXANE (541-02-6): Bacterial reverse mutation test: No mutagenic components identified. (Salmonella typhimurium and Escherichia coli ; with and without metabolic activation) ; Method: OECD 471 In vitro gene mutations test on mammalian cells: No mutagenic components identified. (Mouse lymphoma cells ; with and without metabolic activation) ; Method: OECD 476 Chromosomal aberration: No clastogenic effect. (Chinese hamster lung cells ; with and without metabolic activation) ; Method: OECD 473

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): Bacterial reverse mutation test: No mutagenic effect. (Salmonella typhimurium ; with and without metabolic activation) ; Method: OECD 471 In vitro gene mutations test on mammalian cells: No mutagenic effect. (Mouse lymphoma cells ; with and without metabolic activation) ; Method: Similar to OECD 476 In vitro mammalian chromosomal aberration test: No clastogenic effect. (Chinese hamster ovary cells ; with and without metabolic activation) ; Method: Similar to OECD 473

In vivo: Based on our knowledge of the composition information:

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6): Mammalian erythrocyte micronucleus test: No mutagenic effect. (Mouse ; Intraperitoneal) ; Method: OECD 474

DECAMETHYLCYCLOPENTASILOXANE (541-02-6): Mammalian erythrocyte micronucleus test: negative (Rat ; Female, Male ; Inhalation) ; Method: OECD 474 Unscheduled DNA Synthesis (UDS) Test with mammalian liver cells in vivo: negative (Rat ; Female, Male ; Inhalation) ; Method: OECD 486







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|   |                    | NOAEL (terato): > 2 427 mg/l ; NOAEL (mater): > 2 427 mg/l<br>(Rat ; Inhalation) ; Method: OECD 414 ; No adverse effect<br>observed.<br>NOAEL (terato): > 2 427 mg/l ; NOAEL (mater): > 2 427 mg/l<br>(Rabbit ; Inhalation) ; Method: OECD 414 ; No adverse effect<br>observed.   |
|   |                    | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOAEL (terato): > 8,492 mg/l ; NOAEL (mater): 3,64 mg/l<br>(Rat ; Inhalation - vapour) ; Method: Similar to OECD 414 ;<br>The product is not considered to be toxic for development.<br>NOAEL (terato): > 6,066 mg/l ; NOAEL (mater): 3,64 mg/l<br>(Rabbit ; Inhalation - vapour) ; Method: Similar to OECD 414<br>; The product is not considered to be toxic for development. |
| Specific Target Organ Tox<br>Based on our knowledge of information:                   |                    |   |
|   |                    | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Based on available data, the classification criteria are not<br>met.  |
|   |                    | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Based on available data, the classification criteria are not<br>met.  |
| Specific Target Organ Tox<br>Based on our knowledge o<br>information:                 |                    |   |
|   |                    | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Based on available data, the classification criteria are not<br>met.   |
|   |                    | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Based on available data, the classification criteria are not<br>met.  |
|   |                    | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Based on available data, the classification criteria are not<br>met.  |
| Aspiration Hazard:<br>Based on our knowledge of information:                          | of the composition | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Based on available data, the classification criteria are not<br>met.   |
|   |                    | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Not applicable  |
|   |                    | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):  |



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|      |  |              | Based on available data, the classification criteria are not met.   |
| 11.2 | Information on other hazards:<br>Endocrine disrupting properties                         | s:           | No data available.  |
| SEC  | <b>FION 12: Ecological information</b>   |              |   |
|      | General information:   |              | The maximum concentration of Octamethylcyclotetrasiloxane (D4) leachable from the product is below the established no-<br>effect threshold (<0.0079 mg/l) for aquatic organisms.  |
| 12.1 | Toxicity:<br>Acute toxicity:<br>Fish: Based on our knowledge<br>composition information: | of the       | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>LC 50 (Oncorhynchus mykiss; 96 h ; Flow through) : > 0,016<br>mg/l ; Method: OECD 204 ; No toxicity at the limit of solubility   |
|      |  |              | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>LC 50 (Oncorhynchus mykiss; 96 h ; Flow through) : > 0,016<br>mg/l ; Method: OECD 204<br>NOEC (Oncorhynchus mykiss; 96 h ; Flow through) : >=<br>0,016 mg/l ; Method: OECD 204  |
|      |  |              | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>LC 50 (Oncorhynchus mykiss; 96 h ; Flow through) : > 0,022<br>mg/l ; Method: According to a standardised method.  |
|      | Aquatic Invertebrates: Based of<br>knowledge of the composition i                        |              | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>EC 50 (Water flea (Daphnia magna); 48 h ; Flow through) : ><br>0,0029 mg/l ; Method: OECD 202 ; No toxicity at the limit of<br>solubility<br>DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>EC 50 (Water flea (Daphnia magna); 48 h ; Flow through) : ><br>0,0029 mg/l ; Method: OECD 202<br>NOEC (Water flea (Daphnia magna); 48 h ; Flow through) :<br>>= 0,0029 mg/l ; Method: OECD 202<br>OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>EC 50 (Water flea (Daphnia magna); 48 h ; Flow through) : ><br>0,015 mg/l ; Method: According to a standardised method. |
|      | Aquatic plants: Based on our ke<br>the composition information:                          | nowledge of  | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>NOEC (growth rate) (Algae (Pseudokirchneriella<br>subcapitata); 72 h ; Static) : >= 0,002 mg/l ; Method: OECD<br>201 ; No toxicity at the limit of solubility<br>ErC50 (Algae (Pseudokirchneriella subcapitata); 72 h ;<br>Static) : > 0,002 mg/l ; Method: OECD 201 ; No toxicity at the<br>limit of solubility   |
|      |  |              | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>EC 50 (Algae (Pseudokirchneriella subcapitata); 96 h ;<br>Static) : > 0,012 mg/l ; Method: OECD 201<br>NOEC (Algae (Pseudokirchneriella subcapitata); 96 h ;<br>Static) : >= 0,012 mg/l ; Method: OECD 201  |
|      |  |              | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):  |



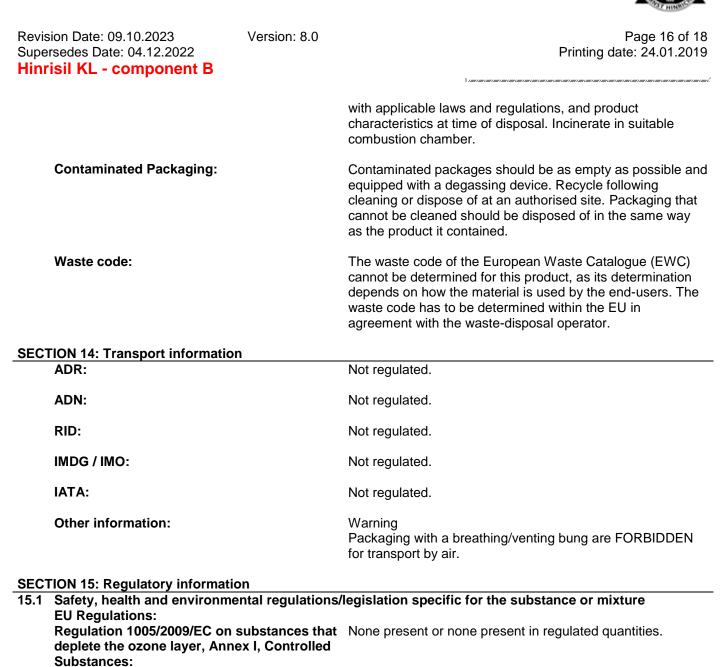
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|------|---|-----------------|---|
|      |   |                 | ErC50 (Algae (Pseudokirchneriella subcapitata); 96 h) : ><br>0,022 mg/l ; Method: According to a standardised method.<br>ErC10 (Algae (Pseudokirchneriella subcapitata); 96 h) : >=<br>0,022 mg/l ; Method: According to a standardised method. |
|      | Toxicity to microorganisms:<br>knowledge of the compositio                                  |                 | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>EC 50 (3 h) : > 10 000 mg/l   |
|      | Chronic Toxicity:<br>Fish: Based on our knowledg<br>composition information:                | je of the       | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>NOEC (Oncorhynchus mykiss; 90 d ; Flow through) : >=<br>0,014 mg/l ; Method: OECD 210 ; No toxicity at the limit of<br>solubility  |
|      |   |                 | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>NOEC (Oncorhynchus mykiss; 90 d ; Flow through) : >=<br>0,014 mg/l ; Method: OECD 210   |
|      |   |                 | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOEC (Oncorhynchus mykiss; 93 d ; Flow through) : >=<br>0,0044 mg/l ; Method: According to a standardised method.   |
|      | Aquatic Invertebrates: Based knowledge of the compositio                                    |                 | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>NOEC (Water flea (Daphnia magna); 21 d ; semi-static) : >=<br>0,0046 mg/l ; Method: OECD 211 ; No toxicity at the limit of<br>solubility   |
|      |   |                 | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>NOEC (Water flea (Daphnia magna); 21 d ; semi-static) : >=<br>0,015 mg/l ; Method: OECD 211   |
|      |   |                 | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>NOEC (Water flea (Daphnia magna); 21 d ; Flow through) :<br>>= 0,015 mg/l ; Method: According to a standardised<br>method.  |
| 12.2 | Persistence and Degradabilit<br>Biodegradation: Based on ou<br>the composition information: | ir knowledge of | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>4,5 % (activated sludge, domestic, non-adapted ; 28 d) ;<br>Method: OECD 310 ; The product is not readily<br>biodegradable.  |
|      |   |                 | DECAMETHYLCYCLOPENTASILOXANE (541-02-6): 0,14 % (28 d) ; The product is not readily biodegradable.  |
|      |   |                 | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>3,7 % (activated sludge and sewage, soil ; 28 d) ; Method:<br>OECD 310 ; The product is not considered to be readily<br>biodegradable.  |
|      | BOD/COD Ratio:  |                 | No data available.  |

| EG-MATERIAL | . SAFETY | DATA | SHEET |
|-------------|----------|------|-------|
|-------------|----------|------|-------|



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|------|---|--|--|--|
| 12.3 | Bioaccumulative potential:<br>Bioconcentration Factor (BCF): Based or<br>our knowledge of the composition<br>information: | DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Bioconcentration Factor (BCF): 2 860 (Fathead Minnow ; 49<br>d) ; Method: OECD 305 ; Has the potential to bioaccumulate   |  |  |
|      |   | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Bioconcentration Factor (BCF): 16 200 (Pimephales<br>promelas) ; Method: OECD 305 ; The product is not<br>bioaccumulating.   |  |  |
|      |   | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Bioconcentration Factor (BCF): 14 900 (Fathead Minnow) ;<br>Method: OECD 305 ; Not bioaccumulable based on the<br>depuration rate constant   |  |  |
|      | Partition coefficient (n-octanol/water): Ba<br>on our knowledge of the composition<br>information:                        | ased DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Log Kow: 8,87 (23 °C)  |  |  |
|      |   | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Log Kow: 5,20<br>Log Kow: 8,02 (25,3 °C) ; Method: OECD 123  |  |  |
|      |   | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Log Kow: 5,10  |  |  |
| 12.4 | Mobility in Soil:   | No data available.   |  |  |
| 12.5 | Results of PBT and vPvB assessment:<br>Based on our knowledge of the composit<br>information:                             | tion DODECAMETHYLCYCLOHEXASILOXANE (540-97-6):<br>Meets vPvB criteria (REACH (1907/2006) Ax XIII)  |  |  |
|      |   | DECAMETHYLCYCLOPENTASILOXANE (541-02-6):<br>Meets vPvB criteria (REACH (1907/2006) Ax XIII)  |  |  |
|      |   | OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):<br>Meets PBT (persistent/bioaccumulative/toxic) criteria.<br>(REACH (1907/2006) Ax XIII)<br>Meets vPvB criteria (REACH (1907/2006) Ax XIII)   |  |  |
| 12.6 | Endocrine disrupting properties:  | No data available.   |  |  |
| 12.7 | Other adverse effects:  | No data available.   |  |  |
|      | FION 13: Disposal considerations  |  |  |  |
| 13.1 | Waste treatment methods:  | Do not empty into drains. The user's attention is drawn to the<br>possible existence of local regulations regarding disposal.<br>Please observe the important information mentioned in the<br>other sections. In particular, information on hazards<br>identification and product stability and reactivity under<br>sections 2 and 10. |  |  |
|      | Disposal methods:   | Waste of this material should not be mixed with other waste.<br>Provide measures such as vented bungs to ensure pressure<br>relief in the waste container. Dispose of waste at an<br>appropriate treatment and disposal facility in accordance   |  |  |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



| Regulation 1005/2009/EC on substances that | None present or none present in regulated quantities. |
|--|---|
| deplete the ozone layer, Annex II, New     |   |
| Substances:                                |   |

EU. Regulation 2019/1021/EU on persistent None present or none present in regulated quantities. organic pollutants (POPs) (recast), as amended:

**Regulation (EU) No. 649/2012 concerning the** None present or none present in regulated quantities. **export and import of dangerous chemicals, Annex I, Part 1 as amended:** 

| Regulation (EU) No. 649/2012 concerning the | None present or none present in regulated quantities. |
|---|---|
| export and import of dangerous chemicals,   |   |
| Annex I, Part 2 as amended:                 |   |

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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Regulation (EU) No. 649/2012 concerning the None present or none present in regulated quantities. export and import of dangerous chemicals, Annex I, Part 3 as amended:

Regulation (EU) No. 649/2012 concerning the None present or none present in regulated quantities. export and import of dangerous chemicals, Annex V as amended:

#### EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17:

| Chemical name                           | CAS-No.   |
|---|---|
| octamethylcyclotetrasiloxane; [D4]      | 556-67-2  |
| EU. REACH Annex XIV, Substances Subject | None present or none present in regulated quantities. |
| to Authorization:                       |   |
| EU. REACH Annex XIV, Substances Subject | None present or none present in regulated quantities. |
| to Authorization:                       |   |

#### EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

| Chemical name                      | CAS-No.  | Concentration | Additional Information   |
|------------------------------------|----------|---------------|--------------------------|
| Dodecamethylcyclohexasiloxane      | 540-97-6 | 0,1 - 1,0%    | very Persistent and very |
|                                    |          |               | Bioaccumulative (vPvB)   |
| Decamethylcyclopentasiloxane       | 541-02-6 | 0,1 - 1,0%    | very Persistent and very |
|                                    |          |               | Bioaccumulative (vPvB)   |
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 0,01 - 0,079% | very Persistent and very |
|                                    |          |               | Bioaccumulative          |
|                                    |          |               | (vPvB)Persistent,        |
|                                    |          |               | Bioaccumulative and      |
|                                    |          |               | Toxic (PBT)              |

#### Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

| Chemical name                      | CAS-No.  | Entry No: | Concentration: |
|------------------------------------|----------|-----------|----------------|
| Decamethylcyclopentasiloxane       | 541-02-6 | 70        | 70             |
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 70        | 0,01 - 0,079%  |

#### Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

| Chemical name                      | CAS-No.  | Concentration |
|------------------------------------|----------|---------------|
| octamethylcyclotetrasiloxane; [D4] | 556-67-2 | 0,01 - 0,079% |

EU. Regulation No. 166/2006 PRTR (Pollutant None present or none present in regulated quantities. Release and Transfer Registry), Annex II: **Pollutants:** 

EU. Directive 2012/18/EU (SEVESO III) on Not applicable major accident hazards involving dangerous substances, Annex I:

**National Regulations:** Wassergefährdungsklasse (WGK):

WGK 1: schwach wassergefährdend. Einstufung nach AwSV, Anlage 1 (5.2)

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



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|--|--|--|---|--|--|
| Water Ha   | Water Hazard Class (WGK):  |  | WGK 1: slightly water-endangering. Classification according to AwSV, Appendix 1 (5.2)   |  |  |
| 15.2 Chemical  | .2 Chemical safety assessment:   |  | Surface treated silica: When encapsulated in a polymer, is<br>not expected to pose a health hazard when processed under<br>normal conditions of use. For safe use information, please<br>refer to section 8 of this SDS.  |  |  |
| Australia I<br>Canada D<br>Canada N<br>Japan (EN<br>Korea Exis<br>New Zeala<br>Philippine<br>Taiwan Ch<br>Thailand D<br>Vietnam N<br>EINECS, I | Inventory Status:<br>Australia Industrial Chem. Act (AIIC):<br>Canada DSL Inventory List:<br>Canada NDSL Inventory:<br>Japan (ENCS) List:<br>Korea Existing Chemicals Inv. (KECI):<br>New Zealand Inventory of Chemicals:<br>Philippines PICCS:<br>Taiwan Chemical Substance Inventory:<br>Thailand DIW Existing Chemical Inv. List:<br>Vietnam National Chemical Inventory:<br>EINECS, ELINCS or NLP: |  | Not in compliance with the inventory.<br>Not in compliance with the inventory.<br>On or in compliance with the inventory.<br>Not in compliance with the inventory.<br>On or in compliance with the inventory. |  |  |
| SECTION 3: Mod   |  | nulative and tox<br>very bioaccumu<br>erse Effect Leve | n:<br>n:<br>ic substance<br>lative subst  |  | n on ingredients                           |

ED: Endocrine Disruptor

SVHC: Listed on the Candidate List of substances of very high concern (SVHC)

#### Wording of the H-statements in section 2 and 3:

- EUH066 Repeated exposure may cause skin dryness or cracking.
- EUH210 Safety data sheet available on request.
- H226 Flammable liquid and vapour.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

#### **Issue Date:**

09.10.2023

#### **Disclaimer:**

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment