1. Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier
Product name: PDMS
CAS-No.: not applicable
EC-No.: not applicable

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet
Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555
Emergency Phone: +49 9287 881-174 (during office hours)
Fax: +49 9287 881-505
E-mail Address: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
not classified

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
not applicable

Hazard pictograms:

Signalword:

Hazard statements: none
Precautionary statements: none
Additional information: none

2.3 Other hazards
When used as intended - none

Results of PBT- und vPvB assessment
PBT: Persistent bioaccumulative and toxic substance
vPvB: Very persistent and very bioaccumulative substance
3. Composition / information on ingredients

3.1 Chemical characterization:

Mixture: Polydimethylsiloxane

CAS-No. Description: none

Identification number(s):

EC number: none

Formula: not applicable

Molar mass [g/mol]: not applicable

3.2 General Information: Substances of Very High Concern (SVHC):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-Nr.:</th>
<th>Classification</th>
<th>Concentration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclopentasiloxane</td>
<td>541-02-6</td>
<td>none</td>
<td>≤ 1,27%</td>
</tr>
<tr>
<td>Dodecamethylcyclohexasiloxane</td>
<td>540-97-6</td>
<td>none</td>
<td>≤ 1,138%</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>Flam.Liq.3: H226; Repr.2: H361f; Aq.Chr.2: H411</td>
<td>≤ 0,53%</td>
</tr>
</tbody>
</table>

4. First aid measures

4.1 Description of first aid measures

General information: Seek medical attention in case of complaints

After inhalation: Move the person to fresh air and ensure unhindered breathing

After skin contact: In case of contact with skin, remove product mechanically. Wash skin thoroughly with soap and water

After eye contact: Rinse thoroughly with clean water, seek medical attention

After swallowing: Drink plenty of water, do not induce vomiting

4.2 Most important symptoms and effects, both acute and delayed

none known

4.3 Indication of any immediate medical attention and special treatment needed

no harmful effect known, symptomatic treatment

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: Carbon dioxide, foam, water spray, ABC dry powder

For safety reasons unsuitable extinguishing agents: Water in full jet
5.2  **Special hazards arising from the substance or mixture**

In case of fire, hazardous combustion gases and vapors may be generated.

**In case of fire, the following can be released:**
Carbon monoxide, carbon dioxide, silicon dioxide smoke

5.3  **Advice for firefighters**

**Protective equipment:**
Wear self-contained respiratory protective device.

**Additional information:**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Prevent fire-fighting water from entering surface water or groundwater.

6.  **Accidental release measures**

6.1  **Personal precautions, protective equipment and emergency procedures**

Ensure safety while standing. Contaminated surfaces can be slippery.

6.2  **Environmental precautions**

Do not allow to enter sewers / ground water or penetrate the soil. Retain and dispose of contaminated water.

6.3  **Methods and material for containment and cleaning up**

Pick up mechanically. Use a binding agent. Dispose of the material collected according to regulations.

6.4  **Reference to other sections**

See Section 13 for disposal information.

7.  **Handling and storage**

7.1  **Precautions for safe handling**

Avoid contact with eyes, skin and clothing. 

**Information about fire and explosion protection:**
No special measures required.

7.2  **Conditions for safe storage, including any incompatibilities**

Requirements to be safe storage, including any incompatibilities: Keep container tightly closed.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: none

Recommended storage temperature: 4° - 30°C

7.3  **Specific end use(s)**

Application in the laboratory
8. Exposure controls / personal protection

Additional information about design of technical facilities: none

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: no occupational exposure limit values known

Additional information: none

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Avoid contact with skin and eyes.

Individual protection measures: none

Respiratory protection: not required

Protection of hands: Light protective gloves (no latex)

Eye protection: Safety goggles

Body protection: Work clothing
9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

**General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Paste</td>
</tr>
<tr>
<td>Colour:</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>not applicable</td>
</tr>
<tr>
<td>pH-value:</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point / Melting range:</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / Boiling range:</td>
<td>&gt; 260°C</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 150°C</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>No data available</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Self-igniting:</td>
<td>No data available</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper:</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure at 20°C:</td>
<td>1,33 hPa</td>
</tr>
<tr>
<td>Density at 20°C:</td>
<td>1,0 g/cm³</td>
</tr>
<tr>
<td>Relative density:</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>&gt; 1,0 (air = 1)</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol / water):</td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viskosity</strong></td>
<td></td>
</tr>
<tr>
<td>Shear viscosity</td>
<td>12 kPas (25°C)</td>
</tr>
<tr>
<td>(complex component, temperature = 25 °C, angular frequency = 1 rad / s)</td>
<td></td>
</tr>
</tbody>
</table>

9.2 Other information

none
10. Stability and reactivity

10.1 Reactivity
Sluggish chemical reaction. No further data available

10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
Stable; No data available

10.3 Possibility of hazardous reactions
No hazardous reactions known

10.4 Conditions to avoid
Keep away from heat, sparks and open flames

10.5 Incompatible materials
None known

10.6 Hazardous decomposition products
Carbon oxides, silicon oxides. Measurements at temperatures above 150°C in the presence of air (oxygen) have shown that formaldehyde is formed in small quantities by oxidative degradation.

11. Toxicological information

11.1 Information on toxicological effects
Acute toxicity
LD / LC50 values relevant for classification: LD 50 (rat) > 5000mg/kg (literature reference)

Potential health effects
Skin: No data available
Eyes: Short-term reversible visual opacity (Oilfilm)
Inhalation: No data available
Ingestion: No data available
Sensitization: No data available

CMR effects
Germ cell mutagenicity: no effect known
Carcinogenicity: no effect known
Reproductive toxicity: no effect known

Aspiration hazard:
Not classified

Specific target organ toxicity – single exposure:
No data available

Specific target organ toxicity – repeated exposure:
No data available
Additional toxicological information:
none

Further information:
The product should be handled with the usual care as necessary for chemicals.

12. Ecological information

12.1 Toxicity
Aquatic toxicity

<table>
<thead>
<tr>
<th>Fish toxicity</th>
<th>LC50</th>
<th>Not classified as environmentally hazardous</th>
</tr>
</thead>
</table>

12.2 Persistence and degradability

Persistence: No data available for the total mixture
Degradability: No data available for the total mixture

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

Ecotoxic effects
Remark: Do not allow to enter waters, waste water, or soil!

12.5 Results of PBT and vPvB assessment

PBT: Persistent bioaccumulative and toxic
vPvB: Very persistent and very bioaccumulative

12.6 Other adverse effects
No data available

13. Disposal considerations

13.1 Waste treatment methods
Recommendation: Dispose of residues in accordance with local regulations. Waste code must be classified as hazardous.

Uncleaned packaging
Recommendation: Dispose of as unused product.
14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN-Number</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es) / -label</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>14.4 Packing group:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>Not dangerous goods</td>
<td>Not dangerous goods</td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td>Label:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>danger symbol:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>14.5 Environmental hazards:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user
Keep it separate from food and drink

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.

15. Regulatory information

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

National regulations:
Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Waterhazard class: 2

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

16. Other Information

Guarantee
This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

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