Safety Data Sheet

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

### 1.1. Product identifier <br> onetime perfect putty base

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

Use of the substance/mixture
Impression material for use in dental technology.
1.3. Details of the supplier of the safety data sheet

Company name:
DETAX GmbH
Street:
Place:
Telephone:
e-mail:
Internet:
Responsible Department:
1.4. Emergency telephone number:

Carl-Zeiss-Straße 4
D-76275 Ettlingen
+49 7243/510-0
post@detax.com
www.detax.com

Telefax: +49 7243/510-100

This number is only obtainable during office hours
(Monday - Thursday 8.00 a.m. -5.00 p.m., Friday 8.00 a.m. -4.00 p.m.)
+1-800-424-9300 (CHEMTREC worldwide)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No. 1907/2006
Aquatic Chronic 3; H412
Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

Regulation (EC) No. 1907/2006

## Hazard statements

H412 Harmful to aquatic life with long lasting effects.
Precautionary statements
P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with local and national regulations.

## Additional advice on labelling

According to Regulation (EC) 1272/2008, art. 1 No. 5 (d) this product as a medical product must not be labelled!

### 2.3. Other hazards

The mixture contains the following substances fulfilling the PBT criteria according to UK REACH: Dodecamethylcyclohexasiloxane; Decamethylcyclopentasiloxane; Octamethylcyclotetrasiloxane. The mixture contains the following substances fulfilling the vPvB criteria according to UK REACH: Dodecamethylcyclohexasiloxane; Decamethylcyclopentasiloxane; Octamethylcyclotetrasiloxane. No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical characterization
Contains polydimethylsiloxane with functional groups. + fillers and pigment

Revision date: 10.11.2022
Product code: 10218
Page 2 of 10

## Hazardous components

| CAS No | Chemical name |  |  | Quantity |
| :---: | :---: | :---: | :---: | :---: |
|  | EC No | Index No | REACH No |  |
|  | Classification (Regulation (EC) No. 1907/2006) |  |  |  |
| 14464-46-1 | cristobalite flour |  |  | 40-<60\% |
|  | 238-455-4 |  |  |  |
|  | STOT RE 1; H372 |  |  |  |
| 8042-47-5 | paraffin oil |  |  | 0.1-< 5 \% |
|  | 232-455-8 |  | 01-2119487078-27 |  |
|  | Asp. Tox. 1; H304 |  |  |  |
| 540-97-6 | Dodecamethylcyclohexasiloxane |  |  | $0.1-<5 \%$ |
|  | 208-762-8 |  | 01-2119517435-42 |  |
|  |  |  |  |  |
| 541-02-6 | Decamethylcyclopentasiloxane |  |  | $0.1-<5 \%$ |
|  | 208-764-9 |  | 01-2119511367-43 |  |
|  |  |  |  |  |
| 556-67-2 | Octamethylcyclotetrasiloxane |  |  | < 0.1 \% |
|  | 209-136-7 | 014-018-00-1 | 01-2119529238-36 |  |
|  | Flam. Liq. 3, Repr. 2, Aquatic Chronic 1; H226 H361f H410 |  |  |  |

Full text of H and EUH statements: see section 16.
Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
| :---: | :---: | :---: | :---: |
|  | Specific Conc. Limits, M-factors and ATE |  |  |
| 8042-47-5 | 232-455-8 | paraffin oil | 0.1-< 5 \% |
|  | inhalation: LC50 = >5 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg |  |  |
| 540-97-6 | 208-762-8 | Dodecamethylcyclohexasiloxane | 0.1-<5\% |
|  | dermal: LD50 = $2000 \mathrm{mg} / \mathrm{kg}$; oral: LD50 = $2000 \mathrm{mg} / \mathrm{kg}$ |  |  |
| 541-02-6 | 208-764-9 | Decamethylcyclopentasiloxane | 0.1-<5\% |
|  | inhalation: LC50 = 8,67 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >24100 mg/kg |  |  |
| 556-67-2 | 209-136-7 | Octamethylcyclotetrasiloxane | < 0.1 \% |
|  | inhalation: LC50 = $36 \mathrm{mg} / \mathrm{l}$ (vapours); dermal: LD50 $=>2400 \mathrm{mg} / \mathrm{kg}$; oral: LD50 $=4800 \mathrm{mg} / \mathrm{kg}$ M chron.; H410: $\mathrm{M}=10$ |  |  |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

## General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

## After inhalation

Provide fresh air. Medical treatment necessary.

## After contact with skin

Remove product mechanically with cloth or paper. Wash with plenty of water and soap. In case of visible changes on the skin or complaints, seek medical advice (if possible have label or safety data sheet with you).

## After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

Safety Data Sheet

## After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect).
Do not induce vomiting. If you feel unwell, seek medical advice.
4.2. Most important symptoms and effects, both acute and delayed

No information available.
4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media
Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable. Vapours can form explosive mixtures with air.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

## Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures <br> General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.
6.3. Methods and material for containment and cleaning up

Other information
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

## Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
Advice on protection against fire and explosion
No special fire protection measures are necessary.

## Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Safety Data Sheet

Revision date: 10.11.2022

### 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.
Hints on joint storage
Do not store with acids, lyes, alcohols, metallic powders and metallic oxides (release of hydrogen is favoured).
Further information on storage conditions
Keep only in the original container in a cool, dry and well-ventilated place, away from foodstuffs.

### 7.3. Specific end use(s)

Impression material for use in dentistry.
For use by trained specialist staff.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

## Exposure limits (EH40)

| CAS No | Substance | ppm | $\mathrm{mg} / \mathrm{m}^{3}$ | fibres $/ \mathrm{ml}$ | Category |
| :--- | :--- | ---: | ---: | ---: | :---: |
| $9005-25-8$ | Starch, respirable | -1 | 4 |  | Origin |

### 8.2. Exposure controls

## Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
Individual protection measures, such as personal protective equipment

## Eye/face protection

Wear eye/face protection.

## Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Suitable are gloves of the following material: NBR (Nitrile rubber)

## Skin protection

Wear suitable protective clothing.
Respiratory protection
In case of inadequate ventilation wear respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:
Putty
Colour:
Odour:

Melting point/freezing point:
Boiling point or initial boiling point and boiling range:
Flammability
Solid/liquid:
base: turquoise
characteristic

## Test method

not determined
not determined
not applicable

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Gas:
Lower explosion limits:
Upper explosion limits:
Flash point:
Auto-ignition temperature:
Decomposition temperature:
pH-Value:
Water solubility:
Solubility in other solvents not determined
Partition coefficient n-octanol/water:
Vapour pressure: (at $20^{\circ} \mathrm{C}$ )
Density (at $20^{\circ} \mathrm{C}$ ):
Relative vapour density:
not applicable not determined not determined

$$
\begin{array}{ll}
>100^{\circ} \mathrm{C} & \text { DIN } 51755 \\
>400^{\circ} \mathrm{C} & \text { DIN } 51794 \\
>180^{\circ} \mathrm{C} &
\end{array}
$$

not determined
practically insoluble
not determined
$<10 \mathrm{hPa}$
$1,43 \mathrm{~g} / \mathrm{cm}^{3}$ DIN 51757
not determined

### 9.2. Other information

Information with regard to physical hazard classes
Self-ignition temperature

| Solid: | not applicable |
| :--- | :--- |
| Gas: | not applicable |

Gas:
not applicable
Oxidizing properties
Not oxidizing.
Other safety characteristics
Evaporation rate: not determined
Solid content: not determined
Viscosity / dynamic: (at $23^{\circ} \mathrm{C}$ )

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.
10.3. Possibility of hazardous reactions

Reacts with : Acids, alkalis, alcohols, powdered metals or metal oxides with release of hydrogen.
10.4. Conditions to avoid

Temperatures $>150^{\circ} \mathrm{C} / 302^{\circ} \mathrm{F}$.
10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

In case of thermic decomposition hydrogen is released.
At a temperature of approx. $150^{\circ} \mathrm{C} / 302^{\circ} \mathrm{F}$ a small amount of formaldehyde can be released by oxidative degradation.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No. 1907/2006

## Acute toxicity

Based on available data, the classification criteria are not met.
For the product itself no toxicological data are available. In products with a comparable composition, a LD50 (orally, species rat) of $>5000 \mathrm{mg} / \mathrm{kg}$ has been found.

## ATEmix calculated

ATE (inhalation vapour) 6446,88 mg/l

| CAS No | Chemical name |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exposure route | Dose |  | Species | Source | Method |
| 8042-47-5 | paraffin oil |  |  |  |  |  |
|  | oral | $\begin{array}{\|l\|l} \hline \mathrm{LD} 50 \\ \mathrm{mg} / \mathrm{kg} \\ \hline \end{array}$ | >5000 | Rat | OECD |  |
|  | dermal | $\begin{aligned} & \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \end{aligned}$ | >2000 | Rabbit | OECD |  |
|  | inhalation (4 h) vapour | LC50 | >5 mg/l | Rat | OECD |  |
| 540-97-6 | Dodecamethylcyclohexasiloxane |  |  |  |  |  |
|  | oral | $\begin{aligned} & \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \end{aligned}$ | 2000 | Rat |  |  |
|  | dermal | $\begin{aligned} & \hline \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \\ & \hline \end{aligned}$ | 2000 | Rat |  |  |
| 541-02-6 | Decamethylcyclopentasiloxane |  |  |  |  |  |
|  | oral | $\begin{array}{\|l} \mathrm{LD} 50 \\ \mathrm{mg} / \mathrm{kg} \\ \hline \end{array}$ | >24100 | Rat | GESTIS |  |
|  | dermal | $\begin{aligned} & \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \end{aligned}$ | >2000 | Rabbit |  | OECD 402 |
|  | inhalation (4 h) vapour | LC50 | 8,67 mg/l | Rat |  | OECD 403 |
| 556-67-2 | Octamethylcyclotetrasiloxane |  |  |  |  |  |
|  | oral | $\begin{aligned} & \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \\ & \hline \end{aligned}$ | 4800 | Rat |  | OECD 401 |
|  | dermal | $\begin{aligned} & \mathrm{LD} 50 \\ & \mathrm{mg} / \mathrm{kg} \end{aligned}$ | >2400 | Rabbit |  | OECD 402 |
|  | inhalation (4 h) vapour | LC50 | $36 \mathrm{mg} / \mathrm{l}$ | Rat | GESTIS | OECD 403 |

## Irritation and corrosivity

Based on available data, the classification criteria are not met.

## Sensitising effects

Based on available data, the classification criteria are not met.
Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.
STOT-single exposure
Based on available data, the classification criteria are not met.

## STOT-repeated exposure

Based on available data, the classification criteria are not met.
Due to physical form (paste) classification with H372 is not appropriate. An inhalation of the product is not possible.
EC regulation 1272/2008 annex 1, section 1.1.1.5: "For the purpose of classification of health hazards (part 3), the route of exposure, information on mechanisms and metabolism studies are useful for determining the relevance of effects in humans. If this information raises doubts as to their relevance in humans, in spite of the indisputable data legitimacy and quality, a lower classification may be justified. When there is scientific evidence that the mechanism or mode of action is not relevant to humans, the substance or mixture should not be classified."

## Aspiration hazard

Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

Safety Data Sheet
according to Regulation (EC) No. 1907/2006
onetime perfect putty base
Revision date: 10.11.2022
Product code: 10218
Page 7 of 10

### 12.1. Toxicity

| CAS No | Chemical name |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aquatic toxicity | Dose |  | [h] \| [d] | Species | Source | Method |
| 8042-47-5 | paraffin oil |  |  |  |  |  |  |
|  | Acute fish toxicity | $\begin{array}{\|l\|l\|} \hline \mathrm{LC} 50 \\ \mathrm{mg} / \mathrm{I} \\ \hline \end{array}$ | >1000 | 96 h | Leuciscus idus (golden orfe) | OECD |  |
|  | Acute algae toxicity | $\begin{array}{\|l\|l} \hline \text { ErC50 } \\ \mathrm{mg} / \mathrm{l} \end{array}$ | >100 | 72 h | Pseudokirchneriella subcapitata | OECD |  |
|  | Acute crustacea toxicity | $\begin{aligned} & \text { EC50 } \\ & \text { mg/I } \end{aligned}$ | >100 |  | Daphnia magna (Big water flea) |  |  |

### 12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Method | Value | d | Source |
|  | Evaluation |  |  |  |
| 8042-47-5 | paraffin oil |  |  |  |
|  | OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D | 31\% | 28 |  |
|  | Not readily biodegradable (according to OECD criteria) |  |  |  |
| 556-67-2 | Octamethylcyclotetrasiloxane |  |  |  |
|  |  | 3,7\% | 29 |  |
|  | Not readily biodegradable (according to OECD criteria) |  |  |  |

### 12.3. Bioaccumulative potential

The product has not been tested.

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

Safety Data Sheet
according to Regulation (EC) No. 1907/2006
onetime perfect putty base
Revision date: 10.11.2022
Product code: 10218
The mixture contains the following substances fulfilling the PBT criteria according to UK REACH: Dodecamethylcyclohexasiloxane; Decamethylcyclopentasiloxane; Octamethylcyclotetrasiloxane. The mixture contains the following substances fulfilling the vPvB criteria according to UK REACH: Dodecamethylcyclohexasiloxane; Decamethylcyclopentasiloxane; Octamethylcyclotetrasiloxane. Dodecamethylcyclohexasiloxane (D6) fulfills the current criteria set forth under Annex XIII of the EU REACH Regulation for very persistent and very bioaccumulative substances ( vPvB ) and was included in the candidate list of substances of very high concern (SVHC). According to our knowledge of the state of the art, however, D6 cannot be compared with known persistent, bioaccumulative and toxic (PBT) and/or vPvB substances. The interpretation of the available data by the silicone industry reveals that scientific evidence obtained from field tests essentially points out that D6 does not lead to biomagnification in aquatic and terrestrial food chains. In air, D6 is decomposed by naturally occurring processes in the atmosphere. D-residues which do not decompose in this way in the air are not expected to accumulate from the air in water, the soil or living organisms.
Decamethylcyclopentasiloxane (D5) fulfills the current criteria set forth under Annex XIII of the EU REACH Regulation for vPvB substances and was included in the candidate list of SVHCs. According to our knowledge of the state of the art, however, D5 cannot be compared with known PBT and/or vPvB substances. The interpretation of the available data by the silicone industry reveals that scientific evidence obtained from field tests essentially points out that D5 does not lead to biomagnification in aquatic and terrestrial food chains. In air, D5 is decomposed by naturally occurring processes in the atmosphere. D-residues which do not decompose in this way in the air are not expected to accumulate from the air in water, the soil or living organisms.
Octamethylcyclotetrasiloxane (D4) fulfills the current criteria set forth under Annex XIII of the EU REACH Regulation for PBT and vPvB substances and was included in the candidate list of SVHCs. According to our knowledge of the state of the art, however, D4 cannot be compared with known PBT and/or vPvB substances. The interpretation of the available data by the silicone industry reveals that scientific evidence obtained from field tests essentially points out that D4 does not lead to biomagnification in aquatic and terrestrial food chains. In air, D4 is decomposed by naturally occurring processes in the atmosphere. D-residues which do not decompose in this way in the air are not expected to accumulate from the air in water, the soil or living organisms.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No information available.
Further information
Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal recommendations
Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

## Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

```
Land transport (ADR/RID)
    14.1. UN number or ID number:
    14.2. UN proper shipping name:
    14.3. Transport hazard class(es):
    14.4. Packing group:
Inland waterways transport (ADN)
```

Safety Data Sheet
according to Regulation (EC) No. 1907/2006
onetime perfect putty base
Revision date: 10.11.2022
Product code: 10218

### 14.1. UN number or ID number:

 14.2. UN proper shipping name:14.3. Transport hazard class(es): 14.4. Packing group:

Marine transport (IMDG)
14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)
14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.
14.6. Special precautions for user

No dangerous good in sense of this transport regulation.
14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

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

EU regulatory information
Authorisations (REACH, annex XIV):
Substances of very high concern, SVHC (REACH, article 59):
Dodecamethylcyclohexasiloxane; Decamethylcyclopentasiloxane; Octamethylcyclotetrasiloxane
Restrictions on use (REACH, annex XVII):
Entry 70, Entry 75
Additional information
The mixture contains substances of very high concern (SVHC candidates):
Dodecamethylcyclohexasiloxane (D6), CAS no. 540-97-6
Decamethylcyclopentasiloxane (D5), CAS no. 541-02-6
Octamethylcyclotetrasiloxane (D4), CAS no. 556-67-2

## National regulatory information

Employment restrictions:
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):
1 - slightly hazardous to water

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

## Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service

Safety Data Sheet

LC50: Lethal concentration, 50\%
LD50: Lethal dose, 50\%
Classification for mixtures and used evaluation method according to Regulation (EC) No. 1907/2006

| Classification | Classification procedure |
| :--- | :--- |
| Aquatic Chronic 3; H412 | Calculation method |

Relevant H and EUH statements (number and full text)
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

## Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.
(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

