**DETAX GmbH** 



## **Safety Data Sheet**

according to Regulation (EC) No. 1907/2006

## onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 1 of 10

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

#### 1.1. Product identifier

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: Carl-Zeiss-Straße 4
Place: D-76275 Ettlingen

Telephone: +49 7243/510-0 Telefax: +49 7243/510-100

e-mail: post@detax.com Internet: www.detax.com

Responsible Department: 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.)

1.4. Emergency telephone +1-800-424-9300 (CHEMTREC worldwide)

number:

#### **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



according to Regulation (EC) No. 1907/2006

# onetime perfect putty base

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 (I	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	Dodecamethylcyclohexasilo	0.1 - < 5 %		
	208-762-8		01-2119517435-42	
541-02-6	Decamethylcyclopentasilox	ane		0.1 - < 5 %
	208-764-9		01-2119511367-43	
556-67-2	Octamethylcyclotetrasiloxa	ne		< 0.1 %
	209-136-7	014-018-00-1	01-2119529238-36	
	Flam. Liq. 3, Repr. 2, Aqua			

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 Cond	. Limits, M-factors and ATE				
8042-47-5	232-455-8	paraffin oil	0.1 - < 5 %			
	inhalation: LO	C50 = >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 mg/kg; oral: LD50 = 2000 mg/kg				
541-02-6	208-764-9	Decamethylcyclopentasiloxane	0.1 - < 5 %			
	inhalation: L0 mg/kg	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 mg/l (vapours); dermal: LD50 = >2400 mg/kg; oral: LD50 = 4800 mg/kg M chron.; H410: 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.





according to Regulation (EC) No. 1907/2006

## onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 3 of 10

#### 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

#### 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.



according to Regulation (EC) No. 1907/2006

# onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 4 of 10

#### 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	mg/m³	fibres/ml	Category	Origin
9005-25-8	Starch, respirable	-	4		TWA (8 h)	WEL

#### 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: base: turquoise Odour: characteristic

Test method

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range: Flammability

Solid/liquid: not applicable



according to Regulation (EC) No. 1907/2006

## onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 5 of 10

Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined

Flash point: >100 °C DIN 51755 Auto-ignition temperature: >400 °C DIN 51794

Decomposition temperature: >180 °C pH-Value: not determined Water solubility: practically insoluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: <10 hPa

(at 20 °C)

Density (at 20 °C): 1,43 g/cm³ DIN 51757

Relative vapour density: not determined

#### 9.2. Other information

#### Information with regard to physical hazard classes

Self-ignition temperature

Solid: not applicable Gas: not applicable

Oxidizing properties Not oxidizing.

## Other safety characteristics

Evaporation rate: not determined Solid content: not determined

Viscosity / dynamic: 8000000 mPa·s BROOKFIELD

(at 23 °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°C/ 302 °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°C/ 302°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 mg/kg has been found.



according to Regulation (EC) No. 1907/2006

## onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 6 of 10

#### **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	LD50 mg/kg	>5000	Rat	OECD			
	dermal	LD50 mg/kg	>2000	Rabbit	OECD			
	inhalation (4 h) vapour	LC50	>5 mg/l	Rat	OECD			
540-97-6	Dodecamethylcyclohexa	siloxane						
	oral	LD50 mg/kg	2000	Rat				
	dermal	LD50 mg/kg	2000	Rat				
541-02-6	Decamethylcyclopentasi	loxane						
	oral	LD50 mg/kg	>24100	Rat	GESTIS			
	dermal	LD50 mg/kg	>2000	Rabbit		OECD 402		
	inhalation (4 h) vapour	LC50	8,67 mg/l	Rat		OECD 403		
556-67-2	Octamethylcyclotetrasilo	xane						
	oral	LD50 mg/kg	4800	Rat		OECD 401		
	dermal	LD50 mg/kg	>2400	Rabbit		OECD 402		
	inhalation (4 h) vapour	LC50	36 mg/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**



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

The product is not: Ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
8042-47-5	paraffin oil						
	Acute fish toxicity	LC50 mg/l	>1000		Leuciscus idus (golden orfe)	OECD	
	Acute algae toxicity	ErC50 mg/l	>100		Pseudokirchneriella subcapitata	OECD	
	Acute crustacea toxicity	EC50 mg/l	>100		Daphnia magna (Big water flea)		

### 12.2. Persistence and degradability

The product has not been tested.

	Todaet nac net seen teetea.					
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



according to Regulation (EC) No. 1907/2006

## onetime perfect putty base

Revision date: 10.11.2022 Product code: 10218 Page 8 of 10

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:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)



according to Regulation (EC) No. 1907/2006

onetime perfect putty base	onetime	perfect	putty	base
----------------------------	---------	---------	-------	------

Revision date: 10.11.2022 Product code: 10218 Page 9 of 10

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group: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



according to Regulation (EC) No. 1907/2006

# onetime perfect putty base

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

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.)