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according to 1907/2006/EC, Article 31

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

· **1.1 Product identifier**

· **Trade name: DUOSIL H**

· **Article number:**
321040
321041

· **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.

· **Application of the substance / the mixture:**
Addition-curing two-component duplicating silicone for dental technology

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
SHERA Werkstoff-Technologie GmbH & Co. KG
Espohlstraße 53
D-49448 Lemförde
GERMANY
sdb@shera.de
+ 49 (0) 54 43 ï 99 33 ï 0

· **Further information obtainable from:** Department of product security.

· **1.4 Emergency telephone number:**
+49 5443 9933-0 This number is serviced during office hours.
Opening times: Monday to Thursday from 8 am - 5 pm, Friday from 8 am - 3 pm.

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008:**
The product is not classified, according to the GB CLP regulation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008:** Void.

· **Hazard pictograms:** Void.

· **Signal word:** Void.

· **Hazard statements:** Void.

· **Precautionary statements:** Void.

· **2.3 Other hazards** Component B (coloured): Chemical bonds that contain silicon-hydrogen bonds (Si-H).

· **Results of PBT and vPvB assessment:**

· **PBT:**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

· **vPvB:**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:**
Polyorganosiloxane mixture, fillers, additive.
Component A, white: Catalyst Component B, coloured: Base, contains polymethyl hydrogen siloxane

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· **Dangerous components:**
Component B, colored:

CAS: 540-97-6 EINECS: 208-762-8	Dodecamethylcyclohexasiloxane Non-classified vPvB substance. Non-classified PBT substance. Substance identified as having endocrine disrupting properties (II).	0.1-<1%
CAS: 541-02-6 EINECS: 208-764-9	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane Non-classified vPvB substance. Non-classified PBT substance. Substance identified as having endocrine disrupting properties (II).	0.1-<1%

· **Ingredients 2. component product:**
Component A, white
No dangerous ingredients.

· **SVHC**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:** The product can´t be breathed in under normal circumstances.
· **After skin contact:**
Wash with water and soap.
Remove dirty clothing and wash before using again.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting. Risk of aspiration!
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Foam.
Use fire extinguishing methods suitable to surrounding conditions.
· **For safety reasons unsuitable extinguishing agents:** Alkaline powder extinguishing agent.
· **5.2 Special hazards arising from the substance or mixture**
Component B: This product can produce hydrogen. Vapours can form mixtures with air which pose a risk of explosion.
· **5.3 Advice for firefighters** In case of fire, cool endangered receptacles with water spray.
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked / spilled product.
Keep away from ignition sources.
· **6.2 Environmental precautions** No special measures required.
· **6.3 Methods and material for containment and cleaning up**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Component B: Do not use a basic product.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep receptacles tightly sealed.
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:**
Keep container in a well-ventilated and dry place.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.
· **Storage class:** No information available.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see item 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
· **Respiratory protection:** Not required.
· **Hand protection**
The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
· **Material of gloves:**
Nitrile rubber, NBR
PVC gloves
Rubber gloves
Plastic gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the

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application.
· **Penetration time of glove material:**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye/face protection** Not required.
· **Body protection:** Protective work clothing.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Colour:**	Component A: white, component B: blue.
· **Odour:**	Odourless
· **Melting point/freezing point:**	Undetermined.
· **Boiling point or initial boiling point and boiling range**	Undetermined.
· **Flammability**	Not determined. Not applicable.
· **Lower and upper explosion limit**	
· **Lower:**	4 Vol % (Wasserstoff/Komp. B)
· **Upper:**	74 Vol % (Wasserstoff/Komp.B)
· **Flash point:**	>200 °C
· **Ignition temperature:**	>400 °C
· **Decomposition temperature:**	>200 °C
· **pH**	Not applicable. Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	Not applicable. Not determined.
· **Dynamic at 20 °C:**	4,500 mPas
· **Solubility**	
· **water:**	Insoluble.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure at 20 °C:**	<0.1 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1.05 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not applicable.
· **9.2 Other information**	Solubility: Diethyl ether: Miscible in any proportion. Chlorinated solvents: Miscible in any proportion. Aromatic hydrocarbons: Miscible in any proportion. Aliphatic hydrocarbons: Miscible in any proportion. Acetone: Barely soluble. Ethanol: Barely soluble.
· **Appearance:**	
· **Form:**	Viscous
· **Important information on protection of health and environment, and on safety.**	
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Change in condition:**	
· **Evaporation rate**	Not applicable.

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· **Information with regard to physical hazard classes**	
· **Explosives**	Void.
· **Flammable gases**	Void.
· **Aerosols**	Void.
· **Oxidising gases**	Void.
· **Gases under pressure**	Void.
· **Flammable liquids**	Void.
· **Flammable solids**	Void.
· **Self-reactive substances and mixtures**	Void.
· **Pyrophoric liquids**	Void.
· **Pyrophoric solids**	Void.
· **Self-heating substances and mixtures**	Void.
· **Substances and mixtures, which emit flammable gases in contact with water**	Void.
· **Oxidising liquids**	Void.
· **Oxidising solids**	Void.
· **Organic peroxides**	Void.
· **Corrosive to metals**	Void.
· **Desensitised explosives**	Void.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No data available.
· **10.2 Chemical stability** No decomposition if used according to specifications.
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions**
Component B: The product can produce hydrogen.
Component A: Unknown.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials**
Oxidizing agents, strong.
Alkalis (alkalis).
Metal salts and metal complexes.
· **10.6 Hazardous decomposition products**
Component B: Reaction with alkalis, amines, strong acids, metal salts. The reaction occurs with formation of hydrogen. Explosion hazard.
Can be released in case of fire:
Poisonous gases / vapours.
Carbon monoxide (CO).
Carbon dioxide (CO_2).
Hydrogen (H).
Amorphous silica.

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SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity:** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
540-97-6 Dodecamethylcyclohexasiloxane		
Oral	NOAEL	≥1,000 mg/kg (Rat) (OECD 422)

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Inhalative	NOAEL	≥0.0182 mg/l (Rat) (OECD 413)
541-02-6 2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane		
Oral	NOAEL	≥1,000 mg/kg (Rat)
Dermal	NOAEL	≥1,600 mg/kg (Rat)
Inhalative	NOAEL	≥2.42 mg/l (Rat)
	LC50	8.67 mg/l (Rat)

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** 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.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
All substances have the value II.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
540-97-6 Dodecamethylcyclohexasiloxane	
NOEC, 72h	≥0.0022 mg/l (Algae)
NOEC, 21d	≥0.0046 mg/l (Daphnia (Daphnia magna))
EC50/72 h	>0.002 mg/l (Algae)
541-02-6 2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane	
NOEC, 90d	≥0.014 mg/l (Algae)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**

· **PBT:**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

· **vPvB:**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

· **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:** Generally not hazardous for water.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation:** Waste disposal according to official state regulations.

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· **Waste disposal key:**
The waste disposal code as prescribed in the EuropeanWaste Catalogue (EWC) depends on the waste producer and can thus vary for a product. The waste disposal code should thus be obtained separately from the waste producer in each case.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR, IMDG, IATA**	Void.
· **ADN**	Void.
· **14.2 UN proper shipping name**	
· **ADR, IMDG, IATA**	Void.
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	Void.
· **ADN/R Class:**	Void.
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void.
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **UN "Model Regulation":**	Void.

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SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

· **Substances of very high concern (SVHC) according to UK REACH**	
540-97-6	Dodecamethylcyclohexasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

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

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SECTION 16: Other information

This information is based on the state of knowledge and experience pertaining on the date of issue. The information is not to be taken as a guarantee of product properties and do not constitute the basis for a contractual legal relationship. The details must not be changed or transferred to other products. Duplication in an unchanged state is permissible.

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· **Department issuing SDS:** Department of product security.
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
· *** Data compared to the previous version altered.**