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

1.1	Product identifier:	
	Commercial product name:	Adisil transparent – component B Duplicating silicone
1.2	Relevant identified uses of the substance or mixture and uses advised against:	
	Identified uses:	Moulding diverse objects.
	Uses advised against:	None known.
1.3	Details of the supplier of the safety data sheet	
	Manufacturer/Supplier:	SILADENT Dr. Böhme & Schöps GmbH
	Street / mailbox:	Im Klei 26
	Country code. / postal code / city:	D - 38644 Goslar
	Phone:	Tel.: +49 (0) 53 21 / 37 79 – 0
	Fax:	Fax: +49 (0) 53 21 / 38 96 32
	E-mail / Website:	info@siladent.de - www.siladent.de
1.4	Further information obtainable from:	
	SILADENT Dr. Böhme & Schöps GmbH:	+49 (0) 53 21 / 37 79 - 0 (Mon-Fri. 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification

2.1.	Classification of the substance or mixture:	The product has not been classified as hazardous according to the legislation in force.
	Classification according to Regulation (EC) No 1272/2008 as amended.	Not classified.
2.2	Label Elements:	Not applicable.
	Hazard summary:	
	Physical Hazards:	No specific recommendations.
	Health Hazards:	
	Inhalation:	No specific symptoms noted.
	Eye contact:	No specific symptoms noted.
	Skin Contact:	No specific symptoms noted.
	Ingestion:	No specific symptoms noted.
	Other Health Effects:	No other information noted.
	Environmental hazards:	Not regarded as dangerous for the environment.
2.3	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". Meets PBT (persistent/bioaccumulative/toxic) criteria Meets vPvB criteria

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of organosiloxanes, additives.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Decamethylcyclopent asiloxane	0,1 - <1%	541-02-6	208-764-9	01-2119511367-43-0003	No data available.	vPvB
Dodecamethylcyclohexasiloxane	0,1 - <1%	540-97-6	208-762-8	01-2119517435-42-0002	No data available.	vPvB
Octamethylcyclotetrasiloxane	0,1 - <1%	556-67-2	209-136-7	01-2119529238-36-0002	No data available.	# 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).

Chemical name	Classification	Notes
Decamethylcyclopentasiloxane	None known.	No data available.
Dodecamethylcyclohexasiloxane	None known.	No data available.
Octamethylcyclotetrasiloxane	Flam. Liq. 3 H226; Repr. 2 H361f; Aquatic Chronic 4 H413;	No data available.

CLP: Regulation No. 1272/2008.
The full text for all H-statements is displayed in section 16.

4. First aid measures:

General: Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.

4.1 Description of first aid measures:

Inhalation: Not relevant.

Skin Contact: Remove contaminated clothing and shoes. Wash with soap and water.

Eye contact: In the event of contact with the eyes, rinse thoroughly with clean water. Continue to rinse for at least 15 minutes.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly.

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:

Hazards: No specific recommendations.

Treatment: No specific recommendations.

5. Fire Fighting measures:

General Fire Hazards: No specific recommendations.

5.1 Extinguishing media

Suitable extinguishing media: Foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire. Alkaline powders.

5.2 Special hazards arising from the substance or mixture: This product may generate hydrogen gas. Vapours may form explosive mixtures with air. For further information, refer to section 10: "Stability and Reactivity".

5.3 Advice for firefighters:

Special firefighting procedures: Water spray should be used to cool containers.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Keep away from Alkalis and caustic products. Eliminate all sources of ignition.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Collect spillage. Prevent entry into waterways, sewer, basements or confined areas. Mechanically ventilate the spillage area to prevent the formation of explosive concentrations.

6.3 Methods and material for containment and cleaning up: Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent (cf.: § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

6.4 Reference to other sections: Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

7. Handling and Storage:

7.1 Precautions for safe handling Use mechanical ventilation in case of handling which causes formation of vapours. Do not mix with Incompatible materials. For further information, refer to section 10: "Stability and Reactivity". Read and follow manufacturer's recommendations.

7.2 Conditions for safe storage, including any incompatibilities: Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Store in tightly closed original container. Equipped with a degassing device. Suitable containers: polyethylene. Steel drums coated with epoxy-resin.

Storage Class: No data available.

7.3 Specific end use(s): No specific recommendations.

8. Exposure controls / Personal protection:

8.1 Control Parameters:

Occupational Exposure Limits:

Chemical name	Type	Exposure Limit Values	Source
Octamethylcyclotetrasiloxane	TWA	10 ppm 120 mg/m3	

8.2 Exposure controls:

Appropriate engineering controls: Avoid inhalation of vapours and spray mists.

Individual protection measures, such as personal protective equipment:

General information: Provide sufficient ventilation during operations which cause vapour formation.

Eye/face protection:	Safety Glasses
Skin protection:	Material: Nitrile.
Hand Protection:	Material: Polyvinyl chloride (PVC). Material: Rubber or plastic.
Other:	It is a good industrial hygiene practice to minimise skin contact. Wear suitable protective clothing.
Respiratory Protection:	No specific precautions.
Hygiene measures:	Provide eyewash station and safety shower.
Environmental Controls:	No data available.

9. Physical and chemical properties:

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Form:	Viscous
Colour:	Colourless
Odour:	Odourless
Odour threshold:	No data available.
pH:	Not applicable.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	> 200 °C (Closed cup according to method ASTM D-56.)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)–:	74 %(V) Hydrogen.
Flammability Limit - Lower (%)–:	4 %(V) Hydrogen.
Vapour pressure:	< 0,1 hPa (20 °C)
Vapour density (air=1):	No data available.
Density:	Approximate 1 kg/dm3 (20 °C)
Solubility(ies):	
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. Ethanol: Very slightly soluble.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	500 °C
Decomposition Temperature:	> 200 °C
Viscosity:	11 000 mm2/s (20°C)
Explosive properties:	No data available.
Oxidizing properties:	According to the data on the components Not considered as oxidising. (evaluation by structure-activity relationship)

9.2 Other information:

No data available.

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 Reactions:

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 gas (hydrogen) is released when it is in contact with: Strong oxidizing agents. Alkalis and caustic products. Chemical compounds with mobile hydrogen, in the presence of metal salts and complexes.
10.6	**Hazardous Decomposition Products:**	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Amorphous silica. Quantity of hydrogen potentially released (l/kg of product): <14

11. Toxicological Information:

Information on likely routes of exposure

Inhalation:	No effects expected (assessment based on ingredients).
Ingestion:	No effects expected (assessment based on ingredients).
Skin Contact:	No effects expected (assessment based on ingredients).
Eye contact:	No effects expected (assessment based on ingredients).

11.1 Information on toxicological effects:

Acute Toxicity:

Oral:

Product:	No effects expected (assessment based on ingredients).

Dermal:

Product:	No effects expected (assessment based on ingredients).

Inhalation:

Product:	Composition/information on ingredients
Decamethylcyclopentasiloxane:	LC 50 (Rat, Female, Male, 4 h): 8,67 mg/l Not classified Aerosol
Octamethylcyclotetrasiloxane:	LC 50 (Rat, Female, Male, 4 h): 36 mg/l Aerosol

Repeated dose toxicity:

Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	NOAEL (Rat(Female, Male), Oral): >= 1 000 mg/kg Method: OECD 408 Subchronic exposure NOAEL (Rat(Female, Male), Inhalation - vapour): >= 2,42 mg/l Method: OECD 453 Chronic exposure NOAEL (Rat(Female, Male), Dermal): >= 1 600 mg/kg Method: OECD 410 Subacute exposure
Dodecamethylcyclohexasiloxane:	NOAEL (Rat(Female, Male), Oral): >= 1 000 mg/kg Method: OECD 422 Subacute exposure NOAEL (Rat(Female, Male), Inhalation - vapour): 0,0182 mg/l Method: OECD 413 Subchronic exposure
Octamethylcyclotetrasiloxane:	NOAEL (Rat(Female, Male), Inhalation - vapour): 1,82 mg/l Method: Similar to OECD 453 Chronic exposure NOAEL (Rabbit(Female, Male), Dermal): >= 960 mg/kg Method: Similar to OECD 410 Subacute exposure

Skin Corrosion/Irritation:

Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	OECD 404 (Rabbit) : Not irritating
Dodecamethylcyclohexasiloxane:	OECD 404 (Rabbit) : Not irritating
Octamethylcyclotetrasiloxane:	Similar to OECD 404 (Rabbit) : Not irritating

Serious Eye Damage/Eye Irritation:

Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	OECD 405 (Rabbit) : Not irritating
Dodecamethylcyclohexasiloxane:	OECD 405 (Rabbit) : Not irritating
Octamethylcyclotetrasiloxane:	OECD 405 (Rabbit) : Not irritating

Respiratory or Skin Sensitization:

Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	OECD 429 (Mouse) : Not a skin sensitizer.
Dodecamethylcyclohexasiloxane:	OECD 406 (Guinea Pig) : Not a skin sensitizer.
Octamethylcyclotetrasiloxane:	OECD 406 (Guinea Pig) : Not a skin sensitizer.

Germ Cell Mutagenicity:
In vitro:

Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	Bacterial reverse mutation test (OECD 471): No mutagenic components identified. with and without metabolic activation In vitro gene mutations test on mammalian cells: (OECD 476): No mutagenic components identified. with and without metabolic activation Chromosomal aberration (OECD 473): No clastogenic effect. with and without metabolic activation
Dodecamethylcyclohexasiloxane:	Bacterial reverse mutation test (OECD 471): No mutagenic effects. with and without metabolic activation In vitro gene mutations test on mammalian cells: (OECD 476): No mutagenic effects. with and without metabolic activation
Octamethylcyclotetrasiloxane:	Bacterial reverse mutation test (OECD 471): No mutagenic effects. with and without metabolic activation In vitro gene mutations test on mammalian cells: (Similar to OECD 476): No mutagenic effects. with and without metabolic activation In vitro mammalian chromosomal aberration test (Similar to OECD 473): No clastogenic effect. with and without metabolic activation

In vivo:
Product: No data available.
Specified substance(s):
Decamethylcyclopentasiloxane: Mammalian erythrocyte micronucleus test (OECD 474): negative
Unscheduled DNA Synthesis (UDS) Test with mammalian liver cells in vivo (OECD 486): negative

Dodecamethylcyclohexasiloxane: Mammalian erythrocyte micronucleus test (OECD 474): No mutagenic effects.

Octamethylcyclotetrasiloxane: Mammalian bone marrow chromosomal aberration test (Similar to OECD 475): negative
Rodent dominant Lethal test (Similar to OECD 478): negative

Carcinogenicity:
Product: No data available.

Reproductive toxicity:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: Not classified.

Dodecamethylcyclohexasiloxane: Not classified.

Octamethylcyclotetrasiloxane: Suspected of damaging fertility.

Reproductive toxicity (Fertility):
Product:
Composition/information on ingredients
Decamethylcyclopentasiloxane: Fertility study 2 generations Rat Female, Male (Inhalation - vapor): NOAEL (parent): > 2,496 mg/l NOAEL (F1): 2,496 mg/l NOAEL (F2): Method: OECD 416

Dodecamethylcyclohexasiloxane: Reproduction/developmental toxicity screening test Rat Female, Male (Gavage (Oral)): NOAEL (parent): >= 1 000 mg/kg NOAEL (F1): 1 000 mg/kg NOAEL (F2): Method: OECD 422 The product is not considered to affect fertility.

Octamethylcyclotetrasiloxane: Fertility study 2 generations Rat Female, Male (Inhalation): NOAEL (parent): 3,64 mg/l NOAEL (F1): 3,64 mg/l NOAEL (F2): Method: Similar to OECD 416 Effects on fertility

Developmental toxicity (Teratogenicity):
Product: Composition/information on ingredients
Specified substance(s):
Dodecamethylcyclohexasiloxane: Rabbit (Gavage (Oral)): >= NOAEL (terato): >= 1 000 mg/kg NOAEL (mater): 1 000 mg/kg Method: OECD 414
Rat (Gavage (Oral)): >= NOAEL (terato): >= 1 000 mg/kg NOAEL (mater): 1 000 mg/kg Method: OECD 414

Octamethylcyclotetrasiloxane:	Rat (Inhalation - vapour): >= NOAEL (terato): >= 8,492 mg/l NOAEL (mater): 3,64 mg/l Method: Similar to OECD 414 The product is not considered to be toxic for development. Rabbit (Inhalation - vapour): >= NOAEL (terato): >= 6,066 mg/l NOAEL (mater): Method: Similar to OECD 414 The product is not considered to be toxic for development.
Specific Target Organ Toxicity - Single Exposure:	
Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	Based on available data, the classification criteria are not met.
Dodecamethylcyclohexasiloxane:	Based on available data, the classification criteria are not met.
Octamethylcyclotetrasiloxane:	Based on available data, the classification criteria are not met.
Specific Target Organ Toxicity - Repeated Exposure:	
Product:	Composition/information on ingredients
Specified substance(s):	
Decamethylcyclopentasiloxane:	Based on available data, the classification criteria are not met.
Dodecamethylcyclohexasiloxane:	Based on available data, the classification criteria are not met.
Octamethylcyclotetrasiloxane:	Based on available data, the classification criteria are not met.
Aspiration Hazard:	
Product:	No data available.
Specified substance(s):	
Decamethylcyclopentasiloxane:	Based on available data, the classification criteria are not met.
Dodecamethylcyclohexasiloxane:	Based on available data, the classification criteria are not met.
Octamethylcyclotetrasiloxane:	Based on available data, the classification criteria are not met.

12. Ecological Information:

12.1	**Toxicity:**	
	Acute toxicity:	
	Fish:	
	Product:	Composition/information on ingredients
	Specified substance(s):	
	Decamethylcyclopentasiloxane:	LC 50 (Oncorhynchus mykiss, 96 h): > 0,016 mg/l NOEC (Oncorhynchus mykiss, 96 h): >= 0,016 mg/l
	Dodecamethylcyclohexasiloxane:	LC 50 (Oncorhynchus mykiss, 96 h): > 0,016 mg/l
	Octamethylcyclotetrasiloxane:	LC 50 (Oncorhynchus mykiss, 96 h): > 0,022 mg/l

Aquatic Invertebrates:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: EC 50 (Water flea (Daphnia magna), 48 h): > 0,0029 mg/l
NOEC (Water flea (Daphnia magna), 48 h): >= 0,0029 mg/l

Dodecamethylcyclohexasiloxane: EC 50 (Water flea (Daphnia magna), 48 h): > 0,0029 mg/

Octamethylcyclotetrasiloxane: EC 50 (Water flea (Daphnia magna), 48 h): > 0,015 mg/l

Chronic Toxicity:
Fish:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: NOEC (Oncorhynchus mykiss, 90 d): >= 0,014 mg/l

Dodecamethylcyclohexasiloxane: NOEC (Oncorhynchus mykiss, 90 d): >= 0,014 mg/l

Octamethylcyclotetrasiloxane: NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l

Aquatic Invertebrates:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: NOEC (Water flea (Daphnia magna), 21 d): >= 0,015 mg/l

Dodecamethylcyclohexasiloxane: NOEC (Water flea (Daphnia magna), 21 d): >= 0,0046 mg/l

Octamethylcyclotetrasiloxane: NOEC (Water flea (Daphnia magna), 21 d): >= 0,015 mg/l

Toxicity to Aquatic Plants:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: EC 50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 0,012 mg/l
NOEC (Algae (Pseudokirchneriella subcapitata), 96 h): >= 0,012 mg/l

Dodecamethylcyclohexasiloxane: NOEC (growth rate) (Algae (Pseudokirchneriella subcapitata), 72 h): >= 0,002 mg/l
ErC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 0,002 mg/l

Octamethylcyclotetrasiloxane: ErC50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 0,022 mg/l
ErC10 (Algae (Pseudokirchneriella subcapitata), 96 h): >= 0,022 mg/l

12.2 Persistence and Degradability:
Biodegradation:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: 0,14 % (28 d) The product is not readily biodegradable.

Dodecamethylcyclohexasiloxane: 4,5 % (28 d, OECD 310) The product is not readily biodegradable.

Octamethylcyclotetrasiloxane: 3,7 % (29 d, OECD 310) The product is not considered to be readily biodegradable.

BOD/COD Ratio:
Product: No data available.

12.3 Bioaccumulative Potential:
Product: Composition/information on ingredients
Specified substance(s):
Decamethylcyclopentasiloxane: Pimephales promelas, Bioconcentration Factor (BCF): 16 200 (OECD 305) The product is not bioaccumulating.

Dodecamethylcyclohexasiloxane: Fathead Minnow, Bioconcentration Factor (BCF): 2 860 (OECD 305) Has the potential to bioaccumulate.

Octamethylcyclotetrasiloxane: Fathead Minnow, Bioconcentration Factor (BCF): 14 900 (OECD 305) Not bioaccumulable based on the depuration rate constant

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: Composition/information on ingredients

Decamethylcyclopentasiloxane	Meets vPvB criteria	REACH (1907/2006) Ax XIII
Dodecamethylcyclohexasiloxane	Meets vPvB criteria	REACH (1907/2006) Ax XIII
Octamethylcyclotetrasiloxane	Meets PBT (persistent/bioaccumulative/ toxic) criteria, Meets vPvB criteria	REACH (1907/2006) Ax XIII

12.6 Other Adverse Effects: None known.

13. Disposal Considerations:

13.1 Waste treatment methods
General information: The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods:
Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Waste of this material should not be mixed with other waste. Provide measures such as vented bungs to ensure pressure relief in the waste container.

Contaminated Packaging: Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

14. Transport Information:

This material is not subject to transport regulations.

Other information: Warning Packaging with a breathing/venting bung are FORBIDDEN for transport by air.

14.7	**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**	Not applicable.

15. Regulatory Information:

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

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):	None.
National Regulations:	
Wassergefährdungs-klasse (WGK):	WGK 2: deutlich wassergefährdend
Water Hazard Class (WGK):	WGK 2: significantly water-endangering
15.2 Chemical safety assessment:	No Chemical Safety Assessment has been carried out.

Inventory Status

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory

16. Other Information:

Revision Information: Not relevant.

References

PBT	PBT: persistent, bioaccumulative and toxic substance.
vPvB	vPvB: very persistent and very bioaccumulative substance.

Key abbreviations or acronyms used: No data available.

Key literature references and sources for data: No data available.

Wording of H-statements in section 2 and 3:

H226	Flammable liquid and vapour.
H361f	Suspected of damaging fertility.
H413	May cause long lasting harmful effects to aquatic life.

Training information: No data available.

Issue Date: 30.10.2019

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.