SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation(EU) No. 2020/878

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

1.1 Product identifier

Product name: Silop.C 1

Chemical name	None.
INDEX No.	Not applicable
CAS-No.	70131-67-8
EC No.	-
REACH Registration No.	

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

Identified uses: Raw material for silicone elastomers
Uses advised against: Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Distributor Information	:	Momentive Performance Materials GmbH Chempark Leverkusen Gebaeude V7 DE - 51368 Leverkusen Germany
Contact person	:	commercial.services@momentive.com
Telephone	:	General information +390510924300 (Customer Service Centre)
1.4 Emergency telephone number	:	Europe, Israel & All other: +44 (0) 1235239670; Middle East:+44 (0) 1235239671

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

The product is not classified for chronic aquatic toxicity, for further details see section 16

2.2 Label Elements Not applicable
Additional Information: No data available.

2.3 Other hazards

PBT/vPvB data
vPvB: very persistent and very bioaccumulative substance.

Endocrine disrupting properties-Toxicity
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine disrupting properties-Ecotoxicity
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Chemical nature: Hydroxyterminated Polydimethylsiloxane

3.1 Substances

General information: No data available.
Chemical name
INDEX No.: Not applicable
CAS-No.: 70131-67-8
EC No.:
REACH Registration No.:
M-Factor: Not applicable

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Dodecamethylcyclohexasiloxane	0,1 - <1%	540-97-6	208-762-8	01-2119517435-42-XXXX	Not applicable	vPvB
Octamethylcyclotetrasiloxane	0,01 - <0,1%	556-67-2	209-136-7	01-2119529238-36-XXXX	Aquatic Toxicity (Chronic): 10	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).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

SECTION 4: First aid measures

General: Move into fresh air and keep at rest. Get medical attention if symptoms occur. Treat symptomatically.

4.1 Description of first aid measures

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Eye contact: Rinse the eye with water immediately. Get medical attention if symptoms occur.

Skin Contact: After contact with skin, remove product mechanically. Get medical attention if symptoms occur.

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical attention.

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 information about adverse effects due to exposure.

Treatment: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If swallowed, do NOT induce vomiting. Give a glass of water.

SECTION 5: Firefighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool.

5.1 Extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

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

5.2 Special hazards arising from the substance or mixture: In case of fire, carbon monoxide and carbon dioxide may be formed.

5.3 Advice for firefighters

Special fire-fighting procedures: Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Keep away from sources of ignition - No smoking.

Special protective equipment for fire-fighters: Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Caution: Contaminated surfaces may be slippery. Use personal protective equipment.

6.2 Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

6.3 Methods and material for containment and cleaning up: Collect spillage with granulates, sawdust, rags or other absorbent.

6.4 Reference to other sections: No data available.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only in well-ventilated areas.

Storage conditions: Store in original container.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, well-ventilated place.

Storage Stability: No data available.

7.3 Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

None.

8.2 Exposure controls

Appropriate Engineering Controls: Eye washes and showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: When using do not eat, drink or smoke.

Eye/face protection: Safety glasses with side-shields conforming to EN166

Skin protection

Hand Protection: Advice: There is no risk to health due to contact with the chemical. Use hand protection to prevent mechanically injuries.

Other: Wear suitable protective clothing.

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation.

Hygiene measures: Observe good industrial hygiene practices. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Environmental exposure controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	No data available.
pH:	No data available.

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Freezing point:	> -51 °C (No data available.)
Boiling Point:	> 300 °C (1.013 hPa) (No data available.)
Flash Point:	> 161 °C (DIN 51758)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	
Flammability Limit - Lower (%):	
Vapor pressure:	< 100 hPa (20 °C) (No data available.)
Relative vapor density:	> 1,0
Density:	0,98 g/cm3 (20 °C) (DIN 51757) 0,98 g/cm3 (50 °C) (DIN 51757)
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

Minimum ignition temperature:	> 200 °C (DIN 51794)

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous polymerization does not occur.
10.4 Conditions to avoid:	Keep away from heat, sparks and open flame.
10.5 Incompatible Materials:	Strong Acids
10.6 Hazardous Decomposition Products:	Oxides of silicon. Carbon oxides Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

SECTION 11: Toxicological information

General information:	According to current knowledge, polydimethylsiloxanes are not physiologically a problem; but contact with eyes can cause short time, harmless, reversible blurred vision, due to the formation of an oil film on the eye.

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	LD 50 (Rat): 5.000 mg/kg
Specified substance(s)	
Dodecamethylcyclohexasiloxane	LD 50 (Rat): 2.000 mg/kg
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 4.800 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	LD 50 (Rat): 2.000 mg/kg
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 2.375 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	LC50 (Rat, 4 h): 36 mg/l

Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	NOAEL (Rat(male and female), Oral): 1.000 mg/kg
Octamethylcyclotetrasiloxane	No data available.

Skin Corrosion/Irritation:

Product:	(Rabbit, 24 h): No skin irritation
Specified substance(s)	
Dodecamethylcyclohexasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): No skin irritation
Octamethylcyclotetrasiloxane	OECD Test Guideline 404 (Rabbit): Non irritating

Serious Eye Damage/Eye Irritation:

Product:	(Rabbit): No eye irritation
Specified substance(s)	
Dodecamethylcyclohexasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit, 72 h): No eye irritation Not irritating

Octamethylcyclotetrasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): negative
Octamethylcyclotetrasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): Not sensitizing

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic) Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Intraperitoneal (Mouse, male and female): negative
Octamethylcyclotetrasiloxane	Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative

Carcinogenicity

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

Aspiration Hazard

Product:	No data available.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

11.2 Information on other hazards

Endocrine disrupting properties

Product:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
Components:	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

Other effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product:	LC50 (Leuciscus idus, 96 h): 200 mg/l
Specified substance(s)	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0,022 mg/l

Aquatic Invertebrates

Product:	No data available.
Specified substance(s)	
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0,015 mg/l

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 91 d): 0,014 mg/l
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): 0,0046 mg/l EC50 (Sediment Invertebrate, 28 d): > 420 mg/l LOEC (Sediment Invertebrate, 28 d): >= 420 mg/l
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0,015 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No effects at the limit of solubility. ; EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 0,002 mg/l (OECD Test Guideline 201) No effects at the limit of solubility. ; NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): >= 0,002 mg/l (OECD Test Guideline 201)
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0,022 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	(29 d, 310 Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)): 3,7 % Persistent Not readily biodegradable.

BOD/COD Ratio

Product No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	Bioconcentration Factor (BCF): 12.400

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

12.5 Results of PBT and vPvB assessment: vPvB: very persistent and very bioaccumulative substance.

Dodecamethylcyclohexasiloxane	vPvB: very persistent and very bioaccumulative substance.	Dodecamethylcyclohexasiloxane (D6) meets the current EU REACH Annex XIII criteria for vPvB and has been added to the candidate list for Substances of very high concern (SVHC)., *However our understanding of the available science is that D6 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by naturally occurring reactions in the atmosphere. Any D6 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms*
Octamethylcyclotetrasiloxane	Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)	Octamethylcyclotetrasiloxane (D4) meets the current EU REACh Annex XIII criteria for PBT and vPvB and has been added to the candidate list for Substances of very high concern (SVHC)., *However our understanding of the available science is that D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by naturally occurring reactions in the atmosphere. Any D4 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms.*

12.6 Endocrine disrupting properties:

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

12.7 Other adverse effects:

Other hazards

Product: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

Disposal methods: Can be incinerated when in compliance with local regulations.

SECTION 14: Transport information

ADR

Not regulated.

ADN

Not regulated.

RID

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.6 Special precautions for user: Not dangerous for transport Protect from moisture. Keep away from food, drink and animal feeding stuffs. This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable

SECTION 15: Regulatory information

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

EU Regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:

none

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

Chemical name	CAS-No.	Concentration
Dodecamethylcyclohexasiloxane	540-97-6	0 - <=0,272%

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

Chemical name	CAS-No.	Concentration
Dodecamethylcyclohexasiloxane	540-97-6	0,1 - 1,0%

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: None present or none present in regulated quantities.

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work: none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Inventory Status

Australia AICS:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: On TSCA Inventory
Taiwan Chemical Substance Inventory:	y (positive listing)	Remarks: None.

REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks**:** None.

SECTION 16: Other information

Revision Information: Not relevant.

Key literature references and sources for data: The partition coefficient of D4 between PDMS and water has been determined as log KPDMS-water =7.09. It follows that PDMS containing up to 3%w/w D4 will generate a thermodynamic limit concentration of 2.4 µg D4/L in the water phase. The critical 21d-NOEC for daphnia of 7.9 µg D4/L will not be reached. The product is therefore not classified for chronic aquatic toxicity

Wording of the H-statements in section 2 and 3: none

Training information: No data available.

Issue Date: 23.10.2022

Disclaimer:

Notice to reader

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.
They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only asa guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warrantyor quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.