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: RTV41

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

Identified uses: Silicone Elastomer
Uses advised against: For industrial use only.

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 been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label Elements

Hazard Statement(s): H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment.

Response: P391: Collect spillage.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Unknown toxicity - Environment

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	0 %

Additional Information: This product is a mixture containing polymer compounds and hazardous substances as listed in section 3. The relevant hazardous classification according to CLP Directive 1272/2008 is stated in section 2 of this SDS. Although the preparation is classified as a hazardous preparation it does not present a danger to human health by inhalation, ingestion or contact with the skin or to aquatic environment in the form in which it is placed on the market. According to Annex I No. 1.3.4.1 of the Directive 1272/2008 such preparations do not require a label.

2.3 Other hazards

PBT/vPvB data
Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)

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: Polydimethylsiloxane with filler and coloured pigment.

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Zinc oxide	10 - <25%	1314-13-2	215-222-5	01-2119463881-32-XXXX	Not applicable	#

Silicic acid, ethyl ester	1 - <5%	11099-06-2	234-324-0	No data available.	Not applicable	
Octamethylcyclotetrasiloxane	0,25 - <1%	556-67-2	209-136-7	01-2119529238-36-XXXX	Aquatic Toxicity (Chronic): 10	PBT, vPvB
Decamethylcyclopentasiloxane	0,1 - <1%	541-02-6	208-764-9	01-2119511367-43-XXXX	Not applicable	vPvB
Dodecamethylcyclohexasiloxane	0,1 - <1%	540-97-6	208-762-8	01-2119517435-42-XXXX	Not applicable	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.

Classification

Chemical name	Classification	Notes
Zinc oxide	Aquatic Acute: 1: H400; Aquatic Chronic: 1: H410; No data available.	No data available.
Silicic acid, ethyl ester	Flam. Liq.: 3: H226; STOT SE: 3: H335; Eye Dam.: 2: H319; Acute Tox.: 4: H302;	
Octamethylcyclotetrasiloxane	Flam. Liq.: 3: H226; Repr.: 2: H361f; Aquatic Chronic: 1: H410;	No data available.
Decamethylcyclopentasiloxane	No data available.	
Dodecamethylcyclohexasiloxane	No data available.	

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

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

4.1 Description of first aid measures

Inhalation: Move the exposed person to fresh air at once.

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

Skin Contact: After contact with skin, remove product mechanically. Flush contaminated skin with plenty of water.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Consult a physician for specific advice.

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 data available.

Treatment: No data available.

SECTION 5: Firefighting measures

General Fire Hazards: Use standard firefighting procedures and consider the hazards of other involved materials.

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. Exposure to fire can generate toxic fumes. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

5.3 Advice for firefighters

Special fire-fighting procedures: To prevent and minimize fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system. Cool fire-endangered containers with water.

Special protective equipment for fire-fighters: 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: Use personal protective equipment. Use only in well-ventilated areas.

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

6.3 Methods and material for containment and cleaning up: Absorb spillage with suitable absorbent material. Sweep up and shovel into suitable containers for disposal. Clean thoroughly.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. Collect and dispose of spillage as indicated in section 13 of the SDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Use only in well-ventilated areas.

Storage conditions: No data available.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, well-ventilated place. Keep away from water or moist air.

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

Chemical name	Type	Exposure Limit Values	Source
Calcium Carbonate - Respirable dust.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (01 2020)
Calcium Carbonate - Inhalable dust.	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (01 2020)
Calcium Carbonate - Respirable.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Calcium Carbonate - Inhalable	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Calcium Carbonate - Inhalable dust.	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Calcium Carbonate - Respirable dust.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Zinc oxide - Inhalable dust.	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (01 2020)
Zinc oxide - Respirable dust.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (01 2020)

Biological Limit Values

None.

8.2 Exposure controls

Appropriate Engineering Controls: Eye wash facilities and emergency shower must be available when handling this product. Use only in well-ventilated areas.

Individual protection measures, such as personal protective equipment

General information: Do not eat, drink or smoke when using the product.

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

Skin protection

Hand Protection: Advice: This recommendation is valid only for our Product as delivered. If this product will be mixed with other substances you need to contact a supplier of CE approved protective gloves (e.g. KCL GmbH, D-36124 Eichenzell, Tel. 0049 (0) 6659 87300, Fax. 0049 (0) 6659 87155, email: vertrieb@kcl.de).
Material: 730 Camatril
Minimum break through time: 480 min
Glove thickness: 0,4 mm
Guideline: EN 374

Other: Wear suitable protective clothing.

Respiratory Protection: Use only in well-ventilated areas. In case of inadequate ventilation use suitable respirator.

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. When using do not eat, drink or smoke.

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:	White
Odor:	Faint
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	> 300 °C
Flash Point:	> 121 °C (Closed Cup)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Relative vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	No data available.
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

No data available.

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:	No data available.
10.5 Incompatible Materials:	Reacts with water liberating small amounts of methanol. Avoid contact with acids and oxidizing substances.

10.6 Hazardous Decomposition Products: Oxides of silicon. Carbon oxides Tin fumes. 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: Experience has shown, that the above mentioned product can be used without any danger to health, as long as the usual conditions of industrial hygiene are observed.

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: ATEmix: 25.000 mg/kg

Specified substance(s)

Zinc oxide	LD 50 (Rat): > 5.000 mg/kg
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 4.800 mg/kg
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	LD 50 (Rat): 2.000 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 2.375 mg/kg
Decamethylcyclopentasiloxane	LD 50 (Rabbit): > 2.000 mg/kg
Dodecamethylcyclohexasiloxane	LD 50 (Rat): 2.000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	LC50 (Rat, 4 h): 36 mg/l
Decamethylcyclopentasiloxane	LC50 (Rat, 4 h): 8,67 mg/l
Dodecamethylcyclohexasiloxane	No data available.

Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	NOAEL (Rat(male and female), Oral, 90 d): 1.000 mg/kg NOAEL (Rat(male and female), Dermal, 28 d): 1.600 mg/kg NOAEC (Rat(male and female), Inhalation - vapor, 2 y): 160 ppm
Dodecamethylcyclohexasiloxane	NOAEL (Rat(male and female), Oral): 1.000 mg/kg

Skin Corrosion/Irritation:

Product:	No data available.
Specified substance(s)	
Zinc oxide	(Rabbit): No skin irritation
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	OECD Test Guideline 404 (Rabbit): Non irritating
Decamethylcyclopentasiloxane	OECD Test Guideline 404 (Rabbit, 72 h): Non irritating
Dodecamethylcyclohexasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): No skin irritation

Serious Eye Damage/Eye Irritation:

Product:	No data available.
Specified substance(s)	
Zinc oxide	(Rabbit): slightly irritating (not classified according to the German Dangerous Substances legislation)
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating
Decamethylcyclopentasiloxane	OECD Test Guideline 405 (Rabbit, 72 h): Non irritating
Dodecamethylcyclohexasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit, 72 h): No eye irritation Not irritating

Respiratory or Skin Sensitization:

Product:	No data available.
Specified substance(s)	
Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): Not sensitizing
Decamethylcyclopentasiloxane	LLNA (Local Lymph Node Assay), OECD Guideline 429 (LLNA) (Mouse): Non sensitizing.
Dodecamethylcyclohexasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): negative

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Specified substance(s)	
Zinc oxide	No data available.

Silicic acid, ethyl ester	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)
Decamethylcyclopentasiloxane	Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic) Mammalian cytogenicity test (Mouse Lymphoma Assay (OECD Guidline 476)): negative (not mutagenic) Chromosomal aberration (OECD 473): negative (not mutagenic)
Dodecamethylcyclohexasiloxane	No data available.

In vivo

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative
Decamethylcyclopentasiloxane	(OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female)negative (not mutagenic) Vapor.
Dodecamethylcyclohexasiloxane	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Intraperitoneal (Mouse, male and female): negative

Carcinogenicity

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

Reproductive toxicity

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.

Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	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:

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

Other effects: Octamethylcyclotetrasiloxane (D4) Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/kg/day,14 days), developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver

weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation), with D4. Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0,022 mg/l
Decamethylcyclopentasiloxane	LC50 (Oncorhynchus mykiss, 96 h): > 0,0016 mg/l (OECD-Guideline 204)
Dodecamethylcyclohexasiloxane	No data available.

Aquatic Invertebrates

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0,015 mg/l
Decamethylcyclopentasiloxane	EC50 (Daphnia magna, 48 h): > 0,0029 mg/l (OECD Test Guideline 202)
Dodecamethylcyclohexasiloxane	No data available.

Chronic Toxicity

Fish

Product:	No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l
Decamethylcyclopentasiloxane	NOEC (Oncorhynchus mykiss, 90 d): >= 0,0014 mg/l (OECD-Guideline 210) LOEC (Oncorhynchus mykiss, 90 d): > 0,0014 mg/l (OECD-Guideline 210)
Dodecamethylcyclohexasiloxane	No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 91 d): 0,014 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0,015 mg/l
Decamethylcyclopentasiloxane	NOEC (Daphnia magna, 21 d): >= 0,0015 mg/l (OECD-Guideline 211) LOEC (Daphnia magna, 21 d): > 0,0015 mg/l
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

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0,022 mg/l
Decamethylcyclopentasiloxane	EC50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 0,0012 mg/l (OECD Test Guideline 201) NOEC : >= 0,0012 mg/l EC10 : > 0,0012 mg/l
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)

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	(29 d, 310 Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)): 3,7 % Persistent Not readily biodegradable.
Decamethylcyclopentasiloxane	activated sludge (adaptation not specified) (28 d, OECD Test Guideline 310): 0,14 % The product is not readily biodegradable.
Dodecamethylcyclohexasiloxane	No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	Bioconcentration Factor (BCF): 12.400
Decamethylcyclopentasiloxane	Fathead Minnow, Bioconcentration Factor (BCF): 7.060 (OECD Test Guideline 305)
Dodecamethylcyclohexasiloxane	No data available.

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

12.5 Results of PBT and vPvB assessment: Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)

Zinc oxide	No data available.	
Silicic acid, ethyl ester	No data available.	
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.*

Decamethylcyclopentasiloxane	vPvB: very persistent and very bioaccumulative substance.	Decamethylcyclopentasiloxane (D5) 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 D5 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 D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by naturally occurring reactions in the atmosphere. Any D5 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.*
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*

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:

Zinc oxide	No data available.
Silicic acid, ethyl ester	No data available.
Octamethylcyclotetrasiloxane	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.

12.7 Other adverse effects:

Other hazards

Product: No data available.

Additional Information: Ecotoxicological data for this product is not 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: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods. Keep away from foodstuffs and animal feed.

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
Octamethylcyclotetrasiloxane	556-67-2	0 - <=0,2680%
Decamethylcyclopentasiloxane	541-02-6	0 - <=0,1770%
Dodecamethylcyclohexasiloxane	540-97-6	0 - <=0,1620%

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Concentration
Octamethylcyclotetrasiloxane	556-67-2	0,1 - 1,0%
Decamethylcyclopentasiloxane	541-02-6	0,1 - 1,0%

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.:

Chemical name	CAS-No.	Concentration
Octamethylcyclotetrasiloxane	556-67-2	0,1 - 1,0%

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

Classification	Lower-tier Requirements	Upper-tier Requirements
E2. Hazardous to the aquatic environment	200 t	500 t

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

Chemical name	CAS-No.	Concentration
Zinc oxide	1314-13-2	10 - 20%

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
Zinc oxide	1314-13-2	10 - 20%
Octamethylcyclotetrasiloxane	556-67-2	0,1 - 1,0%

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

Inventory Status

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.

RTV41

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	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

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Training information: No data available.

Classification according to Regulation (EC) No 1272/2008 as amended.

1, H400

Aquatic Chronic 2, H411

Issue Date: 18.11.2022

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.