

TSE397-C

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

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

1.1 Product identifier

Product name: TSE397-C

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

Identified uses: Silicone Elastomer

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
00800.4321.1000 (Customer Service Centre)

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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.

Health Hazards

Serious eye damage Category 2 H319: Causes serious eye irritation.

Toxic to reproduction Category 1B H360FD: May damage fertility. May damage the unborn child.

Environmental Hazards

Chronic hazards to the aquatic environment Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label Elements

Contains: CYCLOPENTYLSILAZANE-AMINOSILOXANE COPOLYMER,
METHOXY TERMINATED
Dibutyltin Dilaurate



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- Signal Words:** Danger
- Hazard Statement(s):** H319: Causes serious eye irritation.
 H360FD: May damage fertility. May damage the unborn child.
 H412: Harmful to aquatic life with long lasting effects.
- Precautionary Statements**
- Prevention:** P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
- Response:** P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310: Immediately call a POISON CENTER/doctor.
 P308+P313: IF exposed or concerned: Get medical advice/attention.
- 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.

Supplemental label information

Contains: gamma-AminopropyltriethoxysilaneDibutyltin Dilaurate
 May produce an allergic reaction.

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %
Acute toxicity, inhalation, vapor	0 %
Acute toxicity, inhalation, dust or mist	0 %

Unknown toxicity - Environment

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

Additional Information: No data available.

2.3 Other hazards No data available.

SECTION 3: Composition/information on ingredients

Chemical nature: Mixture of polydimethylsiloxanes, fillers and cross-linkers.

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes

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CYCLOPENTYLSILAZANE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	1 - <3%	134759-20-9		No data available.	No data available.	
gamma-Aminopropyltriethoxysilane	0,1 - <1%	919-30-2	213-048-4	01-2119480479-24-0002	No data available.	
Dibutyltin Dilaurate	0,3 - <1%	77-58-7	201-039-8	01-2119496068-27-0001	1	#
Decamethylcyclopentasiloxane	0,1 - <1%	541-02-6	208-764-9	01-2119511367-43-0002	No data available.	vPvB
Dodecamethylcyclohexasiloxane	0,1 - <1%	540-97-6	208-762-8	01-2119517435-42-0001	No data available.	vPvB
Octamethylcyclotetrasiloxane	0,1 - <1%	556-67-2	209-136-7	01-2119529238-36-0001	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).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
CYCLOPENTYLSILAZANE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	Eye Dam.: 1: H318; Skin Corr.: 2: H315;	
gamma-Aminopropyltriethoxysilane	Skin Sens.: 1: H317; Acute Tox.: 4: H302; Skin Corr.: 1B: H314; Eye Dam.: 1: H318;	No data available.
Dibutyltin Dilaurate	STOT SE: 1: H370; Skin Corr.: 1C: H314; Skin Sens.: 1: H317; Eye Dam.: 1: H318; Muta.: 2: H341; Repr.: 1B: H360FD; STOT RE: 1: H372; Aquatic Chronic: 1: H410; Aquatic Acute: 1: H400;	No data available. No data available.
Decamethylcyclopentasiloxane	No data available.	
Dodecamethylcyclohexasiloxane	No data available.	
Octamethylcyclotetrasiloxane	Flam. Liq.: 3: H226; Repr.: 2: H361f; Aquatic Chronic: 2: H411;	No data available.

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Move to fresh air.

Eye contact: Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.

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Skin Contact:	After contact with skin, remove product mechanically. Wash area with soap and water.
Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water. Rinse mouth. Consult a physician for specific advice.
4.2 Most important symptoms and effects, both acute and delayed:	Product may hydrolyse upon contact with body fluids in the gastrointestinal tract to produce additional methanol; therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days!
4.3 Indication of any immediate medical attention and special treatment needed	
Hazards:	No data available.
Treatment:	If swallowed, do NOT induce vomiting. Give a glass of water. If swallowed, rinse mouth with water (only if the person is conscious). Product may hydrolyze upon contact with body fluids in the gastrointestinal tract to produce additional methanol. The potential for toxic effects due to methanol formation (eye damage and blindness, metabolic acidosis, dizziness and drowsiness, fetal toxicity, and liver, kidney, and heart muscle damage) should be recognized.

SECTION 5: Firefighting measures

General Fire Hazards:	Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
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:	Reacts with water liberating small amounts of methanol. In case of fire, carbon monoxide and carbon dioxide may be formed. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.
5.3 Advice for firefighters	
Special fire fighting procedures:	Product may charge electrostatically during pouring or filling. Take precautionary measures against static discharges. 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. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Provide adequate ventilation. Use personal protective equipment. Keep container tightly closed and in a well-ventilated place. Caution: Contaminated surfaces may be slippery.
6.2 Environmental Precautions:	Prevent runoff from entering drains, sewers, or streams.
6.3 Methods and material for containment and cleaning up:	Use mechanical handling equipment. Shovel up and place in a container for salvage or disposal.

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6.4 Reference to other sections: Remove sources of ignition.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Methanol is formed during processing. Wear appropriate personal protective equipment.

Storage conditions: Keep away from sources of ignition - No smoking. 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: Material is stable under normal conditions.

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
Silica - Inhalable dust.	TWA	6 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Silica - Respirable dust.	TWA	2,4 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Dibutyltin Dilaurate - as Sn	TWA	0,1 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
	STEL	0,2 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

Biological Limit Values
 None.

DNEL-Values

Critical component	Type	Route of Exposure		Remarks
Dibutyltin Dilaurate	Workers	Dermal	1 mg/kg bw/day	
		Inhalation	0,07 mg/m ³	
		Dermal	0,2 mg/kg bw/day	
	Consumers	Inhalation	0,01 mg/m ³	
		Dermal	0,5 mg/kg bw/day	
		Inhalation	0,02 mg/m ³	
		Ingestion	0,01 mg/kg bw/day	
		Dermal	0,08 mg/kg bw/day	
		Inhalation	0,003 mg/m ³	
		Ingestion	0,002 mg/kg bw/day	

PNEC-Values

Critical component	Environmental compartment		Remarks
Dibutyltin Dilaurate	Water	0,463 µg/l	

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	Seawater	0,0463 µg/l	
	Intermittent release	4,63 µg/l	
	freshwater sediment	0,05 mg/kg	Derived from PNEC(freshwater) using the equilibrium partitioning method.
	Saltwater Sediment	0,005 mg/kg	Derived from PNEC(freshwater) using the equilibrium partitioning method.
	soil	0,0407 mg/kg	
	Sewage treatment plant	100 mg/l	
	Oral	0,2 mg/kg	

8.2 Exposure controls

Appropriate Engineering Controls: Eye wash facilities and emergency shower must be available when handling this product. Observe good industrial hygiene practices.

Individual protection measures, such as personal protective equipment

General information: Wear suitable gloves and eye/face protection.

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
 Glove thickness: 0,4 mm
 Guideline: EN 374

Other: Wear suitable protective clothing and eye/face protection. Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection mask with Filterttype ABEK

Hygiene measures: Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat or drink.

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: Faint
Odor Threshold: No data available.
pH: No data available.
Freezing point: No data available.
Boiling Point: No data available.
Flash Point: 198 °C

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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.
Vapor density (air=1):	No data available.
Density:	> 1,04 g/cm ³ (23 °C)
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:	50.000 mPa·s (23 °C)
Viscosity, kinematic:	> 20,5 mm ² /s (40 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Material is stable under normal conditions.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous polymerisation does not occur. Avoid contact with: Moisture.
10.4 Conditions to avoid:	Keep away from heat, sparks and open flame.
10.5 Incompatible Materials:	Moisture. Strong Acids, Strong Bases
10.6 Hazardous Decomposition Products:	Carbon oxides Oxides of silicon. Generates methanol during cure. 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: In serious cases absorption of methanol in the body may lead to damage to the eyesight.

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

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Oral

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
CYCLOPENTYLSILAZA NE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	LD 50 (Rat): 4.666 mg/kg
gamma- Aminopropyltriethoxysilan e	LD 50 (Rat): 1.570 mg/kg
Dibutyltin Dilaurate	LD 50 (Rat): 2.071 mg/kg
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	LD 50 (Rat): 2.000 mg/kg
Octamethylcyclotetrasilox ane	LD 50 (Rat): 4.800 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
CYCLOPENTYLSILAZ ANE- AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysil ane	LD 50 (Rabbit): 4.290 mg/kg
Dibutyltin Dilaurate	LD 50 (Rat): > 2.000 mg/kg
Decamethylcyclopenta siloxane	LD 50 (Rabbit): > 2.000 mg/kg
Dodecamethylcyclohex asiloxane	LD 50 (Rat): 2.000 mg/kg
Octamethylcyclotetrasil oxane	LD 50 (Rat): > 2.400 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
CYCLOPENTYLSILAZA NE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysilan e	LC50 (Rat, 6 h): LC50 (Rat, 6 h):
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	LC50 (Rat, 4 h): 8,67 mg/l
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox	LC50 (Rat, 4 h): 36 mg/l

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Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
CYCLOPENTYLSILAZA NE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysilane	NOAEL (Rat, Oral, 90 d): 200 mg/kg LOAEL (Rat, Oral, 90 d): 600 mg/kg
Dibutyltin Dilaurate	NOAEL (Rat(male and female), Oral, 28 d): 0,3 - 0,4 mg/l NOAEL (Rat(males), Oral, 28 d): 1,9 - 2,3 mg/l NOAEL (Rat(female), Oral, 28 d): 1,7 - 2,3 mg/l
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
Octamethylcyclotetrasiloxane	NOAEL (Rat(male and female), Inhalation - vapor(vapour)): 150 mg/kg NOAEL (Rabbit(male and female), Dermal): 950 mg/kg LOAEL (Rabbit(male and female), Dermal): 950 mg/kg

Skin Corrosion/Irritation:

Product:	No data available.
Specified substance(s)	
CYCLOPENTYLSILAZANE- AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	Draize (Rabbit, 4 h): Slightly irritating.
gamma- Aminopropyltriethoxysilane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 4 h): Corrosive
Dibutyltin Dilaurate	(Rabbit): Severe skin irritation.
Decamethylcyclopentasiloxane	OECD Test Guideline 404 (Rabbit, 72 h): Non irritating
Dodecamethylcyclohexasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): No skin irritation
Octamethylcyclotetrasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rat): No skin irritation

Serious Eye Damage/Eye Irritation:

Product:	No data available.
Specified substance(s)	
CYCLOPENTYLSILAZANE- AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	Draize (Rabbit, 24 h): Corrosive Risk of serious damage to eyes.
gamma- Aminopropyltriethoxysilane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit, 72 h): Strongly irritating.
Dibutyltin Dilaurate	OECD Test Guideline 405 (Rabbit, 21 d): Strongly irritating. Irritating to eyes.

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CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	(OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Oral (Mouse)positive The health hazard evaluation is based on the toxicological properties of a similar material.
Decamethylcyclopentasil oxane	(OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female)negative (not mutagenic) Vapor.
Dodecamethylcyclohexas iloxane	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Intraperitoneal (Mouse, male and female): negative
Octamethylcyclotetrasilox ane	Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) 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)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox ane	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox ane	No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

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Specified substance(s)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox ane	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox ane	No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED gamma- Aminopropyltriethoxysilan e	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasil oxane	No data available.
Dodecamethylcyclohexas iloxane	No data available.
Octamethylcyclotetrasilox ane	No data available.

Other effects: No data available.

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SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZA
 NE-AMINOSILOXANE

COPOLYMER,
 METHOXY
 TERMINATED

gamma-Aminopropyltriethoxysilane
 LC50 (Brachydanio rerio, 96 h): > 934 mg/l (OECD Test Guideline 203)

Dibutyltin Dilaurate
 No data available.

Decamethylcyclopentasiloxane
 LC50 (Oncorhynchus mykiss, 96 h): > 0,0016 mg/l (OECD-Guideline 204)

Dodecamethylcyclohexasiloxane
 No data available.

Octamethylcyclotetrasiloxane
 No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZA
 NE-AMINOSILOXANE

COPOLYMER,
 METHOXY
 TERMINATED

gamma-Aminopropyltriethoxysilane
 EC50 (Daphnia magna, 48 h): 331 mg/l (OECD-Guideline 202)

Dibutyltin Dilaurate
 EC50 (Daphnia magna, 48 h): < 0,463 mg/l (OECD Test Guideline 202)
 Fresh water

Decamethylcyclopentasiloxane
 EC50 (Daphnia magna, 48 h): > 0,0029 mg/l (OECD Test Guideline 202)

Dodecamethylcyclohexasiloxane
 No data available.

Octamethylcyclotetrasiloxane
 No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZA
 NE-AMINOSILOXANE

COPOLYMER,
 METHOXY
 TERMINATED

gamma-Aminopropyltriethoxysilane
 No data available.

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Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasiloxane	NOEC (Oncorhynchus mykiss, 90 d): $\geq 0,0014$ mg/l (OECD-Guideline 210) LOEC (Oncorhynchus mykiss, 90 d): $> 0,0014$ mg/l (OECD-Guideline 210)
Dodecamethylcyclohexasiloxane	NOEC (Pimephales promelas, 49 d): $0,0044$ mg/l
Octamethylcyclotetrasiloxane	No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZA NE-AMINOSILOXANE COPOLYMER,

METHOXY TERMINATED

gamma-Aminopropyltriethoxysilane No data available.

Dibutyltin Dilaurate No data available.

Decamethylcyclopentasiloxane NOEC (Daphnia magna, 21 d): $\geq 0,0015$ mg/l (OECD-Guideline 211)
 LOEC (Daphnia magna, 21 d): $> 0,0015$ mg/l

Dodecamethylcyclohexasiloxane 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 data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZA NE-AMINOSILOXANE COPOLYMER,

METHOXY TERMINATED

gamma-Aminopropyltriethoxysilane EC50 (Desmodesmus subspicatus (green algae), 72 h): $> 1,000$ mg/l
 NOEC (Desmodesmus subspicatus (green algae), 72 h): $1,3$ mg/l

Dibutyltin Dilaurate EC50 (Desmodesmus subspicatus (green algae), 72 h): > 1 mg/l (OECD Test Guideline 201) Fresh water

Decamethylcyclopentasiloxane EC50 (Algae (Pseudokirchneriella subcapitata), 96 h): $> 0,0012$ mg/l (OECD Test Guideline 201)

NOEC : $\geq 0,0012$ mg/l
 EC10 : $> 0,0012$ mg/l

Dodecamethylcyclohexasiloxane EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): $> 0,002$ mg/l (OECD Test Guideline 201)

NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): $\geq 0,002$ mg/l (OECD Test Guideline 201)

Octamethylcyclotetrasiloxane No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

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CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma-Aminopropyltriethoxysilane	(28 d): 67 % Not readily degradable. hydrolyses
Dibutyltin Dilaurate	Biological degradability (39 d): 23 % The product is 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.
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)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma-Aminopropyltriethoxysilane	No data available.
Dibutyltin Dilaurate	No data available.
Decamethylcyclopentasiloxane	No data available.
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

CYCLOPENTYLSILAZAN E-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.
gamma-Aminopropyltriethoxysilane	Cyprinus carpio, Bioconcentration Factor (BCF): 3,4 (Measured) The product is not bioaccumulating.
Dibutyltin Dilaurate	The product is not bioaccumulating.
Decamethylcyclopentasiloxane	Fathead Minnow, Bioconcentration Factor (BCF): 7.060 (OECD Test Guideline 305)
Dodecamethylcyclohexasiloxane	No data available.
Octamethylcyclotetrasiloxane	Fathead Minnow, Bioconcentration Factor (BCF): 12,40

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

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CYCLOPENTYLSILAZANE -AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.	
gamma- Aminopropyltriethoxysilane	No data available.	
Dibutyltin Dilaurate	No data available.	
Decamethylcyclopentasiloxane	No data available.	
Dodecamethylcyclohexasiloxane	No data available.	
Octamethylcyclotetrasiloxane	No data available.	
12.5 Results of PBT and vPvB assessment:	Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)	
CYCLOPENTYLSILAZANE- AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	No data available.	
gamma- Aminopropyltriethoxysilane	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria, Not fulfilling vPvB (very persistent/very bioaccumulative) criteria	
Dibutyltin Dilaurate	No data available.	
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)., <i>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.</i>
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)., <i>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</i>

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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)., <i>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.</i>
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12.6 Other adverse effects: 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: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods. Protect from moisture. Keep away from food, foodstuff, acids and bases. keep away from odour sensitive materials

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

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Not applicable

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals:

Chemical name	CAS-No.	Concentration
Dibutyltin Dilaurate	77-58-7	0,1 - 1,0%

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
Decamethylcyclopentasiloxane	541-02-6	0 - <=0,2040%
Dodecamethylcyclohexasiloxane	540-97-6	0 - <=0,1730%
Octamethylcyclotetrasiloxane	556-67-2	0 - <=0,1140%

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

Chemical name	CAS-No.	Concentration
Dibutyltin Dilaurate	77-58-7	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.: none

Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances: none

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

Chemical name	CAS-No.	Concentration
Dibutyltin Dilaurate	77-58-7	0,1 - 1,0%

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

Chemical name	CAS-No.	Concentration
gamma-Aminopropyltriethoxysilane	919-30-2	0,1 - 1,0%
Octamethylcyclotetrasiloxane	556-67-2	0,1 - 1,0%

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

Inventory Status

Australia AICS:

T (temporary special case)

Remarks: None.

Canada DSL Inventory List:

q (quantity restricted)

Remarks: None.

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EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inv. Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	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: None.
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: No data available.

Wording of the H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.

Training information: No data available.

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

Eye Dam. 2, H319
 Repr. 1B, H360FD
 Aquatic Chronic 3, H412

Issue Date: 12.08.2018

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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 as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or 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.

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