

LOCTITE SI 5611

Safety Data Sheet according to (EC) No 1907/2006 as amended

Page 1 of 16

SDS No.: 475661

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

1.1. Product identifier

LOCTITE SI 5611

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

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

Category 3

2.2. Label elements

Label elements (CLP):

Hazard statement: H412 Harmful to aquatic life with long lasting effects.

Precautionary statement: P273 Avoid release to the environment.

Prevention

2.3. Other hazards

None if used properly.

This mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Part A of two part adhesive

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
octamethylcyclotetrasiloxane	209-136-7	0,01-< 0,1 %	Flam. Liq. 3
556-67-2	01-2119529238-36		H226
			Repr. 2
			H361f
			Aquatic Chronic 1
			H410
			====
			EU. REACH Candidate List of Substances of
			Very High Concern for Authorization
			(SVHC)
			M factor (Chron Aquat Tox): 10
Decamethylcyclopentasiloxane	208-764-9	0,1-< 1 %	Aquatic Chronic 4
541-02-6	01-2119511367-43		H413
			====
			EU. REACH Candidate List of Substances of
			Very High Concern for Authorization
			(SVHC)
Dodecamethylcyclohexasiloxane	208-762-8	0,1-< 1 %	Aquatic Chronic 4
540-97-6	01-2119517435-42		H413
			====
			EU. REACH Candidate List of Substances of
			Very High Concern for Authorization
			(SVHC)

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Do not induce vomiting.

Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In case of fire, keep containers cool with water spray. carbon oxides.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Scrape up as much material as possible.

Ensure adequate ventilation.

Store in a partly filled, closed container until disposal.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Vapours should be extracted to avoid inhalation.

Avoid skin and eye contact.

See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

Refer to Technical Data Sheet

Never allow product to get in contact with water during storage

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Aluminium hydroxide 21645-51-2 [DUST, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Aluminium hydroxide 21645-51-2 [DUST, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Aluminium hydroxide 21645-51-2 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Aluminium hydroxide 21645-51-2 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		10	Time Weighted Average (TWA):		IR_OEL

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	•	•	mg/l	ppm	mg/kg	others	
Octamethylcyclotetrasiloxane	aqua		0,0015	1.			
556-67-2	(freshwater)		mg/l				
Octamethylcyclotetrasiloxane	aqua (marine		0,00015				
556-67-2	water)		mg/l				
Octamethylcyclotetrasiloxane 556-67-2	sewage treatment plant (STP)		10 mg/l				
Octamethylcyclotetrasiloxane 556-67-2	sediment (freshwater)				3 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	sediment (marine water)				0,3 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	oral				41 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	Soil				0,54 mg/kg		
Decamethylcyclopentasiloxane	aqua		0,0012				
541-02-6	(freshwater)		mg/l				
Decamethylcyclopentasiloxane	aqua (marine		0,00012				
541-02-6	water)		mg/l				
Decamethylcyclopentasiloxane 541-02-6	sewage treatment plant (STP)		10 mg/l				
Decamethylcyclopentasiloxane 541-02-6	sediment (freshwater)				11 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	Soil				2,54 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	oral				16 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	sediment (marine water)				1,1 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	sewage treatment plant (STP)		1 mg/l				
Dodecamethylcyclohexasiloxane 540-97-6	sediment (freshwater)				13 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	Soil				3,77 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	oral				66,7 mg/kg		
Dodecamethylcyclohexasiloxane	sediment	İ			1,3 mg/kg		
540-97-6	(marine water)						

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long term exposure - systemic effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long term exposure - local effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - systemic effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - local effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	oral	Long term exposure - systemic effects		3,7 mg/kg	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Acute/short term exposure - local effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Acute/short term exposure - systemic effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Acute/short term exposure - local effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Acute/short term exposure - systemic effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	oral	Acute/short term exposure - systemic effects		3,7 mg/kg	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - systemic effects		97,3 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - local effects		24,2 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	General population	oral	Long term exposure - systemic effects		5 mg/kg	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Long term exposure - systemic effects		17,3 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Long term exposure - local effects		4,3 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Long term exposure - systemic effects		11 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Long term exposure - local effects		1,22 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Acute/short term exposure - local effects		6,1 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Long term exposure - systemic effects		2,7 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Long term exposure - local effects		0,3 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Acute/short term exposure - local effects		1,5 mg/m3	
Dodecamethylcyclohexasiloxane 540-97-6	General population	oral	Long term exposure - systemic effects		1,7 mg/kg	
Dodecamethylcyclohexasiloxane 540-97-6	General population	oral	Acute/short term exposure - systemic effects		1,7 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly

ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid liquid

white

Odor typical

Odour threshold No data available / Not applicable

pH Not applicable

Melting point

No data available / Not applicable
Solidification temperature

No data available / Not applicable
Initial boiling point

No data available / Not applicable

Flash point $> 200 \,^{\circ}\text{C} (> 392 \,^{\circ}\text{F})$

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable Vapour pressure No data available / Not applicable Relative vapour density: No data available / Not applicable

Density 1,32 g/cm3

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Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable
Insoluble

Not applicable

(Solvent: Water)
Solubility (qualitative)
Soluble

(Solvent: Acetone)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

Viscosity

No data available / Not applicable
No data available / Not applicable
No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable

9.2. Other information

Oxidising properties

No data available / Not applicable

SECTION 10: Stability and reactivity

No data available / Not applicable

10.1. Reactivity

Polymerises in presence of water.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
octamethylcyclotetrasilox	LD50	> 4.800 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
ane				Toxicity)
556-67-2				
Decamethylcyclopentasilo	LD50	> 5.000 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
xane				Toxicity)
541-02-6				
Dodecamethylcyclohexasi	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
loxane				
540-97-6				

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
octamethylcyclotetrasilox	LD50	> 2.375 mg/kg	rat	equivalent or similar to OECD Guideline 402 (Acute
ane				Dermal Toxicity)
556-67-2				
Decamethylcyclopentasilo	LD50	> 2.000 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute
xane				Dermal Toxicity)
541-02-6				
Dodecamethylcyclohexasi	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
loxane				
540-97-6				

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
octamethylcyclotetrasilox	LC50	36 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
ane						Inhalation Toxicity)
556-67-2						
Decamethylcyclopentasilo	LC50	8,67 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
xane						Inhalation Toxicity)
541-02-6						

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
octamethylcyclotetrasilox	not irritating		rabbit	equivalent or similar to OECD Guideline 404 (Acute
ane				Dermal Irritation / Corrosion)
556-67-2				
Decamethylcyclopentasilo	not irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute
xane				Dermal Irritation / Corrosion)
541-02-6				, i
Dodecamethylcyclohexasi	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
loxane				
540-97-6				

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
octamethylcyclotetrasilox	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
ane				Irritation / Corrosion)
556-67-2				·
Decamethylcyclopentasilo	not irritating	24 h	rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
xane				Irritation / Corrosion)
541-02-6				·
Dodecamethylcyclohexasi	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
loxane				
540-97-6				

${\bf Respiratory\ or\ skin\ sensitization:}$

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
octamethylcyclotetrasilox	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
ane		test		
556-67-2				
Decamethylcyclopentasilo	not sensitising	Mouse local lymphnode	mouse	equivalent or similar to OECD Guideline
xane		assay (LLNA)		429 (Skin Sensitisation: Local Lymph
541-02-6				Node Assay)
Dodecamethylcyclohexasi	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
loxane		test		
540-97-6				

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
octamethylcyclotetrasilox ane 556-67-2	negative	bacterial gene mutation assay	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
octamethylcyclotetrasilox ane 556-67-2	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
octamethylcyclotetrasilox ane 556-67-2	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Decamethylcyclopentasilo xane 541-02-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Decamethylcyclopentasilo xane 541-02-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Decamethylcyclopentasilo xane 541-02-6	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Dodecamethylcyclohexasi loxane 540-97-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Dodecamethylcyclohexasi loxane 540-97-6	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
octamethylcyclotetrasilox ane 556-67-2	negative	inhalation		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
octamethylcyclotetrasilox ane 556-67-2	negative	oral: gavage		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Decamethylcyclopentasilo xane 541-02-6	negative	inhalation		rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)
Decamethylcyclopentasilo xane 541-02-6	negative	inhalation: vapour		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Dodecamethylcyclohexasi loxane 540-97-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
octamethylcyclotetrasilox	NOAEL P 300 ppm	two-	inhalation	rat	equivalent or similar to
ane		generation			OECD Guideline 416 (Two-
556-67-2	NOAEL F1 300 ppm	study			Generation Reproduction
					Toxicity Study)
Decamethylcyclopentasilo	NOAEL $P >= 160 \text{ ppm}$	two-	inhalation:	rat	EPA OPPTS 870.3800
xane		generation	vapour		(Reproduction and Fertility
541-02-6	NOAEL F1 $>= 160 \text{ ppm}$	study			Effects)
	NOAEL F2 $>= 160$ ppm				
Dodecamethylcyclohexasi	NOAEL P 1.000 mg/kg	screening	oral: gavage	rat	OECD Guideline 422
loxane	TVOALL 1 1.000 mg/kg	screening	orar. gavage	rat	(Combined Repeated Dose
540-97-6	NOAEL F1 1.000 mg/kg				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
octamethylcyclotetrasilox ane 556-67-2	LOAEL 35 ppm	inhalation	6 h nose only inhalation 5 days/week for 13 weeks	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
octamethylcyclotetrasilox ane 556-67-2	NOAEL 960 mg/kg	dermal	3 w 5 d/w	rabbit	equivalent or similar to OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Decamethylcyclopentasilo xane 541-02-6	NOAEL >= 1.000 mg/kg	oral: gavage	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Dodecamethylcyclohexasi loxane 540-97-6	NOAEL 1.000 mg/kg	oral: gavage	29 d daily, 7 d/w	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
octamethylcyclotetrasiloxane	NOEC	0,0044 mg/l	93 d	Salmo gairdneri (new name:	EPA OPPTS 797.1600 (Fish
556-67-2				Oncorhynchus mykiss)	Early Life Stage Toxicity
					Test)
octamethylcyclotetrasiloxane	LC50	Toxicity > Water	96 h	Oncorhynchus mykiss	EPA OTS 797.1400 (Fish
556-67-2		solubility			Acute Toxicity Test)
Decamethylcyclopentasiloxan	LC50	Toxicity > Water	96 h	Leuciscus idus	OECD Guideline 203 (Fish,
e		solubility			Acute Toxicity Test)
541-02-6					
Decamethylcyclopentasiloxan	NOEC	Toxicity > Water	90 d	Oncorhynchus mykiss	OECD Guideline 210 (fish
e		solubility			early lite stage toxicity test)
541-02-6		-			

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
octamethylcyclotetrasiloxane	EC50	Toxicity > Water	48 h	Daphnia magna	EPA OTS 797.1300
556-67-2		solubility			(Aquatic Invertebrate Acute
		-			Toxicity Test, Freshwater
					Daphnids)
Decamethylcyclopentasiloxan	EC50	Toxicity > Water	48 h	Daphnia magna	OECD Guideline 202
e		solubility			(Daphnia sp. Acute
541-02-6					Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
octamethylcyclotetrasiloxane	NOEC	7.9 μg/l	21 d	Daphnia magna	EPA OTS 797.1330
556-67-2					(Daphnid Chronic Toxicity
					Test)
Decamethylcyclopentasiloxan	NOEC	Toxicity > Water	21 d	Daphnia magna	OECD 211 (Daphnia
e		solubility			magna, Reproduction Test)
541-02-6					
Dodecamethylcyclohexasiloxa	NOEC	Toxicity > Water		Daphnia magna	OECD 211 (Daphnia
ne		solubility			magna, Reproduction Test)
540-97-6					

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
octamethylcyclotetrasiloxane 556-67-2	EC50	Toxicity > Water solubility	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
octamethylcyclotetrasiloxane 556-67-2	EC10	0,022 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
Decamethylcyclopentasiloxan e 541-02-6	NOEC	Toxicity > Water solubility	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Decamethylcyclopentasiloxan e 541-02-6	EC50	Toxicity > Water solubility	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dodecamethylcyclohexasiloxa ne 540-97-6	NOEC	Toxicity > Water solubility		Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dodecamethylcyclohexasiloxa ne 540-97-6	EC50	Toxicity > Water solubility		Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
octamethylcyclotetrasiloxane	EC50	Toxicity > Water	3 h	activated sludge	ISO 8192 (Test for
556-67-2		solubility		_	Inhibition of Oxygen
					Consumption by Activated
					Sludge)
Decamethylcyclopentasiloxan	EC0	> 10.000 mg/l	30 min	Pseudomonas putida	DIN 38412, part 27
e		_		_	(Bacterial oxygen
541-02-6					consumption test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
octamethylcyclotetrasiloxane	not readily biodegradable.	aerobic	3,7 %	29 d	OECD Guideline 310 (Ready
556-67-2					BiodegradabilityCO2 in Sealed
					Vessels (Headspace Test)
Decamethylcyclopentasiloxan	not readily biodegradable.	aerobic	0,14 %	28 d	OECD Guideline 310 (Ready
e					BiodegradabilityCO2 in Sealed
541-02-6					Vessels (Headspace Test)
Dodecamethylcyclohexasiloxa	not readily biodegradable.	aerobic	4,47 %	28 d	OECD Guideline 310 (Ready
ne					BiodegradabilityCO2 in Sealed
540-97-6					Vessels (Headspace Test)

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
octamethylcyclotetrasiloxane 556-67-2	12.400	28 d		Pimephales promelas	EPA OTS 797.1520 (Fish Bioconcentration Test-Rainbow Trout)
Decamethylcyclopentasiloxan e 541-02-6	7.060	35 d		Pimephales promelas	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Dodecamethylcyclohexasiloxa ne 540-97-6	1.160	49 d		Pimephales promelas	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
octamethylcyclotetrasiloxane	6,488	25,1 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-
556-67-2			Stirring Method)
Decamethylcyclopentasiloxan	8,023	25,3 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-
е			Stirring Method)
541-02-6			
Dodecamethylcyclohexasiloxa	8,87	23,6 °C	other guideline:
ne			
540-97-6			

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
octamethylcyclotetrasiloxane	Fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
556-67-2	Bioaccumulative (vPvB) criteria.
Decamethylcyclopentasiloxane	very Persistent and very Bioaccumulative (vPvB)
541-02-6	
Dodecamethylcyclohexasiloxane	Fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
540-97-6	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09* waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

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

VOC content <3 % (2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H226 Flammable liquid and vapor.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 19

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LOCTITE SI 5611

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

1.1. Product identifier

LOCTITE SI 5611

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

Intended use:

Silicone sealant

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Serious eye damage Category 1

H318 Causes serious eye damage.

kin sensitizer Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure Category 2

H371 May cause damage to organs.

Specific target organ toxicity - repeated exposure Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements (CLP):



Contains Trime thoxy vinyl silane

bis(3-(trimethoxysilyl)propyl)amine

Dioctyltin dineodecanoate

4,4'-Di(dimethylbenzyl)diphenylamine

Signal word:	Danger
Hazard statement:	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H371 May cause damage to organs.
	H373 May cause damage to organs through prolonged or repeated exposure.
	H412 Harmful to aquatic life with long lasting effects.
Precautionary statement:	P273 Avoid release to the environment.
Prevention	P280 Wear protective gloves/eye protection.
Precautionary statement:	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
Response	contact lenses, if present and easy to do. Continue rinsing.
	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

None if used properly. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Trimethoxyvinylsilane 2768-02-7	220-449-8 01-2119513215-52	10- 20 %	Flam. Liq. 3 H226 Acute Tox. 4; Inhalation H332 STOT RE 2 H373 Skin Sens. 1B H317
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	280-084-5 403-480-3 01-2119969956-12	5-< 10 %	Eye Dam. 1 H318 Aquatic Chronic 2 H411
3-(Trimethoxysilyl)propylamine 13822-56-5	237-511-5 01-2119510159-45	1-< 5 %	Skin Irrit. 2; Dermal H315 Eye Dam. 1 H318
Dioctyltin dineodecanoate 68299-15-0	269-595-4	1-< 5 %	STOT SE 1; Oral H370 STOT RE 1; Oral H372
Dimethyltindineodecanoate 68928-76-7	273-028-6 01-2120770324-57	1- < 3 %	Acute Tox. 3; Oral H301 Repr. 2 H361d STOT RE 1 H372 Aquatic Chronic 4 H413 Skin Irrit. 2 H315
Hexamethyldisilizane 999-97-3	213-668-5 01-2119438176-38	0,1-< 1 %	Flam. Liq. 2 H225 Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Aquatic Chronic 3 H412
4,4'-Di(dimethylbenzyl)diphenylamine 10081-67-1	233-215-5 01-2119967418-24	0,1-< 1 %	Aquatic Chronic 4 H413 Skin Sens. 1B H317

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. In case of adverse health effects seek medical advice.

Eve contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

SKIN: Rash, Urticaria.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released. Silicon dioxide

5.3. Advice for firefighters

Wear full protective clothing.

Wear self-contained breathing apparatus.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale vapors and fumes.

Avoid skin and eye contact.

Use only in well-ventilated areas.

See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Store in a cool, dry place. Refer to Technical Data Sheet

7.3. Specific end use(s)

Silicone sealant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Bis(neodecanoyloxy)dioctylstannane 68299-15-0 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,1	Time Weighted Average (TWA):		EH40 WEL
Bis(neodecanoyloxy)dioctylstannane 68299-15-0 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Bis(neodecanoyloxy)dioctylstannane 68299-15-0 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,1	Time Weighted Average (TWA):		EH40 WEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Bis(neodecanoyloxy)dioctylstannane 68299-15-0 [TIN, ORGANIC COMPOUNDS]		0,2	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Bis(neodecanoyloxy)dioctylstannane 68299-15-0 [TIN, ORGANIC COMPOUNDS]		0,1	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN, ORGANIC COMPOUNDS]		0,2	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN, ORGANIC COMPOUNDS]		0,1	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
	P	F	mg/l	ppm	mg/kg	others	
Trimethoxyvinylsilane 2768-02-7	aqua (freshwater)		0,4 mg/l				
Trimethoxyvinylsilane 2768-02-7	aqua (marine water)		0,04 mg/l				
Trimethoxyvinylsilane 2768-02-7	aqua (intermittent releases)		2,4 mg/l				
Trimethoxyvinylsilane 2768-02-7	sewage treatment plant (STP)		6,6 mg/l				
Trimethoxyvinylsilane 2768-02-7	sediment (freshwater)				1,5 mg/kg		
Trimethoxyvinylsilane 2768-02-7	sediment (marine water)				0,15 mg/kg		
Trimethoxyvinylsilane 2768-02-7	Soil				0,06 mg/kg		
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	aqua (freshwater)		0,2 mg/l				
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	aqua (marine water)		0,02 mg/l				
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	aqua (intermittent releases)		2 mg/l				
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	sediment (freshwater)				0,72 mg/kg		
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	sediment (marine water)				0,072 mg/kg		
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	Soil				0,026 mg/kg		
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	sewage treatment plant (STP)		22 mg/l				
3-(Trimethoxysilyl)propylamine 13822-56-5	aqua (freshwater)		0,33 mg/l				
3-(Trimethoxysilyl)propylamine 13822-56-5	aqua (marine water)		0,033 mg/l				
3-(Trimethoxysilyl)propylamine 13822-56-5	aqua (intermittent releases)		3,3 mg/l				
3-(Trimethoxysilyl)propylamine 13822-56-5	sediment (freshwater)				1,2 mg/kg		
3-(Trimethoxysilyl)propylamine 13822-56-5	sediment (marine water)				0,12 mg/kg		
3-(Trimethoxysilyl)propylamine 13822-56-5	Soil				0,04 mg/kg		
3-(Trimethoxysilyl)propylamine 13822-56-5	Sewage treatment plant		13 mg/l				
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	aqua (freshwater)		0,25 mg/l				
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	aqua (marine water)		0,025 mg/l				
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	sediment (freshwater)				0,45 mg/kg		
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	sediment (marine water)				0,045 mg/kg		
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Soil				0,22 mg/kg		
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	sewage treatment plant (STP)		67 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Trimethoxyvinylsilane 2768-02-7	Workers	dermal	Long term exposure - systemic effects		3,9 mg/kg	
Trimethoxyvinylsilane 2768-02-7	Workers	inhalation	Long term exposure - systemic effects		27,6 mg/m3	
Trimethoxyvinylsilane 2768-02-7	General population	dermal	Long term exposure - systemic effects		7,8 mg/kg	
Trimethoxyvinylsilane 2768-02-7	General population	inhalation	Long term exposure - systemic effects		6,7 mg/m3	
Trimethoxyvinylsilane 2768-02-7	General population	oral	Long term exposure - systemic effects		0,3 mg/kg	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	Workers	inhalation	Long term exposure - systemic effects		30,41 mg/m3	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	Workers	dermal	Long term exposure - systemic effects		4,31 mg/kg	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	Workers	dermal	Long term exposure - local effects		0,004 mg/cm2	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	General population	inhalation	Long term exposure - systemic effects		5,36 mg/m3	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	General population	dermal	Long term exposure - systemic effects		1,54 mg/kg	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	General population	dermal	Long term exposure - local effects		0,002 mg/cm2	
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	General population	oral	Long term exposure - systemic effects		1,54 mg/kg	
3-(Trimethoxysilyl)propylamine 13822-56-5	Workers	inhalation	Acute/short term exposure - systemic effects		58 mg/m3	
3-(Trimethoxysilyl)propylamine 13822-56-5	Workers	inhalation	Long term exposure - systemic effects		58 mg/m3	
3-(Trimethoxysilyl)propylamine 13822-56-5	Workers	dermal	Acute/short term exposure - systemic effects		8,3 mg/kg	
3-(Trimethoxysilyl)propylamine 13822-56-5	Workers	dermal	Long term exposure - systemic effects		8,3 mg/kg	
3-(Trimethoxysilyl)propylamine 13822-56-5	General population	inhalation	Acute/short term exposure - systemic effects		17,4 mg/m3	
3-(Trimethoxysilyl)propylamine 13822-56-5	General population	inhalation	Long term exposure - systemic effects		17 mg/m3	
3-(Trimethoxysilyl)propylamine 13822-56-5	General population	dermal	Acute/short term exposure - systemic effects		5 mg/kg	
3-(Trimethoxysilyl)propylamine 13822-56-5	General population	dermal	Long term exposure - systemic effects		5 mg/kg	
3-(Trimethoxysilyl)propylamine 13822-56-5	General population	oral	Long term exposure - systemic effects		5 mg/kg	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	inhalation	Long term exposure - systemic effects		53 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	inhalation	Acute/short term exposure -		53 mg/m3	

			systemic effects		
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	inhalation	Long term exposure - local effects	133 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	inhalation	Acute/short term exposure - local effects	133 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	dermal	Long term exposure - systemic effects	7,5 mg/kg	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	Workers	dermal	Acute/short term exposure - systemic effects	7,5 mg/kg	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	inhalation	Long term exposure - systemic effects	3,7 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	inhalation	Acute/short term exposure - systemic effects	3,7 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	inhalation	Long term exposure - local effects	1,7 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	inhalation	Acute/short term exposure - local effects	1,7 mg/m3	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	oral	Long term exposure - systemic effects	1,1 mg/kg	
1,1,1,3,3,3-Hexamethyldisilazane 999-97-3	General population	oral	Acute/short term exposure - systemic effects	1,1 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid

liquid black

Odor characteristic

Odour threshold No data available / Not applicable

pH Not available.

Melting point No data available / Not applicable Solidification temperature No data available / Not applicable

Initial boiling point Not available. Flash point $> 96 \,^{\circ}\text{C} (> 204.8 \,^{\circ}\text{F})$

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable

Vapour pressure Not available.

Relative vapour density:

No data available / Not applicable

Density Not available.

Bulk density No data available / Not applicable Solubility No data available / Not applicable Solubility (qualitative) Polymerises in presence of water. Partition coefficient: n-octanol/water No data available / Not applicable No data available / Not applicable Auto-ignition temperature Decomposition temperature No data available / Not applicable Viscosity No data available / Not applicable Viscosity (kinematic) No data available / Not applicable No data available / Not applicable Explosive properties Oxidising properties No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong acids. Reaction with strong bases

Reaction with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Trimethoxyvinylsilane 2768-02-7	LD50	7.120 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
bis(3- (trimethoxysilyl)propyl)a mine 82985-35-1	LD50	3.780 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
3- (Trimethoxysilyl)propyla mine 13822-56-5	LD50	3.030 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Dioctyltin dineodecanoate 68299-15-0	LD50	> 4.000 mg/kg	rat	not specified
Dimethyltindineodecanoat e 68928-76-7	LD50	160 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Hexamethyldisilizane 999-97-3	LD50	851 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
4,4'- Di(dimethylbenzyl)diphen ylamine 10081-67-1	LD50	> 10.000 mg/kg	rat	not specified

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Trimethoxyvinylsilane 2768-02-7	LD50	3.200 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
bis(3- (trimethoxysilyl)propyl)a mine 82985-35-1	LD50	11.752 mg/kg	rat	not specified
3- (Trimethoxysilyl)propyla mine 13822-56-5	LD50	11.300 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Dimethyltindineodecanoat e 68928-76-7	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Hexamethyldisilizane 999-97-3	LD50	547 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- Di(dimethylbenzyl)diphen ylamine 10081-67-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 434 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Trimethoxyvinylsilane	LC50	16,8 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute
2768-02-7						Inhalation Toxicity)
Hexamethyldisilizane	Acute	10,1 mg/l	vapour			Expert judgement
999-97-3	toxicity					
	estimate					
	(ATE)					

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Trimethoxyvinylsilane 2768-02-7	not irritating		rabbit	other guideline:
bis(3- (trimethoxysilyl)propyl)a mine 82985-35-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
3- (Trimethoxysilyl)propyla mine 13822-56-5	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Dimethyltindineodecanoat e 68928-76-7	irritating or corrosive	15 min	Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE)	OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method)
Dimethyltindineodecanoat e 68928-76-7	not corrosive	1 h	Human, EpiDermTM SIT (EPI-200), Reconstructed Human Epidermis (RHE)	OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
Trimethoxyvinylsilane 2768-02-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
bis(3- (trimethoxysilyl)propyl)a mine 82985-35-1	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
3- (Trimethoxysilyl)propyla mine 13822-56-5	corrosive		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Trimethoxyvinylsilane 2768-02-7	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
3- (Trimethoxysilyl)propyla mine 13822-56-5	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- Di(dimethylbenzyl)diphen ylamine 10081-67-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Trimethoxyvinylsilane 2768-02-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Trimethoxyvinylsilane 2768-02-7	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Trimethoxyvinylsilane 2768-02-7	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Hexamethyldisilizane 999-97-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hexamethyldisilizane 999-97-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Trimethoxyvinylsilane 2768-02-7	NOAEL P 250 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
Trimethoxyvinylsilane 2768-02-7	NOAEL P 1.000 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
Trimethoxyvinylsilane 2768-02-7	NOAEL F1 1.000 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of	Species	Method
			treatment		
Trimethoxyvinylsilane	NOAEL < 62,5 mg/kg	oral: gavage	42d	rat	OECD Guideline 422
2768-02-7			daily		(Combined Repeated
			-		Dose Toxicity Study with
					the Reproduction /
					Developmental Toxicity
					Screening Test)
Trimethoxyvinylsilane	NOAEL 0,605 mg/l	inhalation:	5 days/week for 14	rat	not specified
2768-02-7		vapour	weeks		_
		_	6 hours/day		

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value	Value	Exposure time	Species	Method
Trimethoxyvinylsilane 2768-02-7	type LC50	191 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
bis(3- (trimethoxysilyl)propyl)amine 82985-35-1	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish, Acute Toxicity Test)
3- (Trimethoxysilyl)propylamine 13822-56-5	LC50	> 934 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dioctyltin dineodecanoate 68299-15-0	LC50	Toxicity > Water solubility	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dimethyltindineodecanoate 68928-76-7	LC50	Toxicity > Water solubility	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hexamethyldisilizane 999-97-3	LC50	88 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- Di(dimethylbenzyl)diphenyla mine 10081-67-1	LC50	Toxicity > Water solubility		Poecilia reticulata	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Trimethoxyvinylsilane	EC50	168,7 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute
2768-02-7					Toxicity for Daphnia)
bis(3-	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202
(trimethoxysilyl)propyl)amine					(Daphnia sp. Acute
82985-35-1					Immobilisation Test)
3-	EC50	331 mg/l	48 h	Daphnia magna	OECD Guideline 202
(Trimethoxysilyl)propylamine					(Daphnia sp. Acute
13822-56-5					Immobilisation Test)
Dioctyltin dineodecanoate	EC50	Toxicity > Water	48 h	Daphnia magna	OECD Guideline 202
68299-15-0		solubility			(Daphnia sp. Acute
					Immobilisation Test)
Dimethyltindineodecanoate	EC50	Toxicity > Water	48 h	Daphnia magna	OECD Guideline 202
68928-76-7		solubility			(Daphnia sp. Acute
					Immobilisation Test)
Hexamethyldisilizane	EC50	80 mg/l	48 h	Daphnia magna	OECD Guideline 202
999-97-3		_			(Daphnia sp. Acute
					Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Trimethoxyvinylsilane	NOEC	28,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
2768-02-7					magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Trimethoxyvinylsilane 2768-02-7	EC50	> 957 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
Trimethoxyvinylsilane 2768-02-7	NOEC	957 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
bis(3- (trimethoxysilyl)propyl)amine 82985-35-1	EC50	36 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
bis(3- (trimethoxysilyl)propyl)amine 82985-35-1	NOEC	8,3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
3- (Trimethoxysilyl)propylamine 13822-56-5	EC50	> 1.000 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
3- (Trimethoxysilyl)propylamine 13822-56-5	NOEC	1,3 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
Dioctyltin dineodecanoate 68299-15-0	EC50	Toxicity > Water solubility	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dioctyltin dineodecanoate 68299-15-0	NOEC	Toxicity > Water solubility	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dimethyltindineodecanoate 68928-76-7	EC50	Toxicity > Water solubility	72 h	not specified	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hexamethyldisilizane 999-97-3	NOEC	2,7 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hexamethyldisilizane 999-97-3	EC50	19 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- Di(dimethylbenzyl)diphenyla mine 10081-67-1	EC50	Toxicity > Water solubility			OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Trimethoxyvinylsilane	EC50	> 100 mg/l	3 h	activated sludge of a	OECD Guideline 209
2768-02-7				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)
bis(3-	NOEC	220 mg/l	3 h	activated sludge of a	OECD Guideline 209
(trimethoxysilyl)propyl)amine				predominantly domestic sewage	(Activated Sludge,
82985-35-1					Respiration Inhibition Test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Trimethoxyvinylsilane 2768-02-7	not readily biodegradable.	aerobic	51 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
bis(3- (trimethoxysilyl)propyl)amine 82985-35-1	not readily biodegradable.	aerobic	17 %	28 day	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
3- (Trimethoxysilyl)propylamine 13822-56-5	readily biodegradable	aerobic	80,2 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Dioctyltin dineodecanoate 68299-15-0	not readily biodegradable.	aerobic	1,9 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Dimethyltindineodecanoate 68928-76-7		aerobic	0 - 60 %		OECD 301 A - F
Hexamethyldisilizane 999-97-3	not readily biodegradable.	no data	15,3 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
4,4'- Di(dimethylbenzyl)diphenyla mine 10081-67-1		aerobic	29 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Dioctyltin dineodecanoate 68299-15-0	99	30 d		Oncorhynchus mykiss	OECD Guideline 305 B (Bioaccumulation: Semi-static Fish Test)
Dimethyltindineodecanoate 68928-76-7	8.650				QSAR (Quantitative Structure Activity Relationship)
4,4'- Di(dimethylbenzyl)diphenyla mine 10081-67-1	12 - 57			Cyprinus carpio	EU Method C.13 (Bioconcentration: Flow-through fish test)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
bis(3- (trimethoxysilyl)propyl)amine 82985-35-1	0,2		QSAR (Quantitative Structure Activity Relationship)
3- (Trimethoxysilyl)propylamine 13822-56-5	-1,3	20 °C	QSAR (Quantitative Structure Activity Relationship)
Dimethyltindineodecanoate 68928-76-7	5,5		QSAR (Quantitative Structure Activity Relationship)
4,4'- Di(dimethylbenzyl)diphenyla mine 10081-67-1	7,9	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Trimethoxyvinylsilane 2768-02-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
bis(3-(trimethoxysilyl)propyl)amine 82985-35-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
3-(Trimethoxysilyl)propylamine 13822-56-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Dimethyltindineodecanoate 68928-76-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hexamethyldisilizane 999-97-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4,4'-Di(dimethylbenzyl)diphenylamine 10081-67-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Collection and delivery to recycling enterprise or other registered elimination institution.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09* waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

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

VOC content (2010/75/EC) < 5 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H361d Suspected of damaging the unborn child.

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

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