

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

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LOCTITE STYCAST OS 5101

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

1.1. Product identifier

LOCTITE STYCAST OS 5101

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

Intended use:

1-c- epoxide adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP24RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.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):

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

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):

Hazard pictogram:



Contains

3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate

Bisphenol-F epichlorhy drin resin; MW<700

Signal word: Warning

Hazard statement: H317 May cause an allergic skin reaction.

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.

Precautionary statement: P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Response

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
3,4-Epoxy cyclohexyl methyl-3,4-epoxy	219-207-4	10- 20 %	Skin Sens. 1
cyclohexyl carboxylate	01-2119846133-44		H317
2386-87-0			STOT RE 2
			H373
			Aquatic Chronic 3
			H412
Bisphenol-Fepichlorhydrin resin; MW<700	01-2119454392-40	5- < 10 %	Skin Irrit. 2; Dermal
9003-36-5			H315
			Skin Sens. 1
			H317
			Aquatic Chronic 2
			H411
Quartz (SiO2) "respirable particulates (reaches the alveoli)" (RCS) <0.1% 14808-60-7	238-878-4	1- < 5 %	
3-Ethyloxetane-3-methanol	221-254-0	1-< 5 %	Eye Irrit. 2
3047-32-3	01-2119953280-43		H319
Aromatic sulfonium hexafluoro antimonate	403-500-0	0,025-< 0,25 %	Aquatic Acute 1
159120-95-3	01-2119935057-38		H400
			Aquatic Chronic 1
			H410
			Skin Sens. 1
			H317
			M factor (Acute Aquat Tox): 10 M factor
			(Chron Aquat Tox): 10

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 from a specialist.

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

SKIN: Rash, Urticaria.

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:

water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

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.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

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.

Wear protective equipment.

Ensure adequate ventilation.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

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.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Ensure good ventilation/extraction.

Refer to Technical Data Sheet

Keep container tightly sealed.

7.3. Specific end use(s)

1-c- epoxide adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

In gre dient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category/Remarks	Regulatorylist
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Quartz (SiO2) 14808-60-7 [SILICA, RESPIRABLE CRYST ALLINE]		0,1	Time Weighted Average (TWA):		EH40 WEL
Quartz (SiO2) 14808-60-7 [RESPIRABLE CRYST ALLINE SILICA DUST]		0,1	Time Weighted Average (TWA):		EU OELIII

Occupational Exposure Limits

Valid for

Ireland

In gredient [Regulated substance]	ppm	mg/m ³	Value type	Shortterm exposure limit category/Remarks	Regulatorylist
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL
Quartz (SiO2) 14808-60-7 [RESPIRABLE CRYST ALLINE SILICA DUST]		0,1	Time Weighted Average (TWA):		EU OELIII
Quartz (SiO2) 14808-60-7 [Silica, crystalline, respirable dust (Cristobalite, Quartz, Tridymite, Tripoli)]		0,1	Time Weighted Average (TWA):	Binding OELV	IR_OEL

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

Name on list	En vi ronmental Compartment	Value				Remarks
		 mg/l	ppm	mg/kg	others	
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	aqua (freshwater)	0,024 mg/l				
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	aqua (marine water)	0,0024 mg/l				
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	aqua (intermittent releases)	0,24 mg/l				
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	sewage treatment plant (STP)	19,5 mg/l				
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	sediment (freshwater)			0,211 mg/kg		
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	sediment (marine water)			0,021 mg/kg		
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	Soil			0,028 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	aqua (freshwater)	0,003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	aqua (marine water)	0,0003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	sewage treatment plant (STP)	10 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old)	sediment (freshwater)			0,294 mg/kg		
9003-36-5						
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	sediment (marine water)			0,0294 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Soil			0,237 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	aqua (intermittent releases)	0,0254 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Air					no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Predator					no potential for bioaccumulation
3-Ethyloxetane-3-methanol 3047-32-3	aqua (freshwater)	2,66 mg/l				
3-Ethyloxetane-3-methanol 3047-32-3 3-Ethyloxetane-3-methanol	aqua (marine water)	0,266 mg/l 26,6 mg/l				
3047-32-3	aqua (intermittent releases)					
3-Ethyloxetane-3-methanol 3047-32-3	sewage treatment plant (STP)	10 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	Workers	inhalation	Long term exposure - systemic effects		0,18 mg/m3	
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	Workers	inhalation	Long term exposure - local effects		0,18 mg/m3	
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0	Workers	dermal	Long term exposure - systemic effects		0,05 mg/kg	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Workers	Inhalation	Long term exposure - systemic effects		29,39 mg/m3	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Workers	dermal	Long term exposure - systemic effects		104,15 mg/kg	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Workers	dermal	Acute/short term exposure - local effects		0,0083 mg/cm2	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	General population	Inhalation	Long term exposure - systemic effects		8,7 mg/m3	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	General population	dermal	Long term exposure - systemic effects		62,5 mg/kg	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	General population	oral	Long term exposure - systemic effects		6,25 mg/kg	no hazard identified
3-Ethyloxetane-3-methanol 3047-32-3	Workers	inhalation	Long term exposure - systemic effects		5,9 mg/m3	
3-Ethyloxetane-3-methanol 3047-32-3	Workers	dermal	Long 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; \geq 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

Odour threshold	No data available / Not applicable

pH No data available / 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 > 93 °C (> 199.4 °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 1,83 g/cm3

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Bulk density
No data available / Not applicable
Solubility
No data available / Not applicable
No data available / Not applicable
No data available / Not applicable

Partition coefficient: n-octanol/water
Auto-ignition temperature
No data available / Not applicable
No data available / Not applicable
No data available / Not applicable
Decomposition temperature
No data available / Not applicable

Viscosity 17.000 - 27.000 mPa.s (; 25 °C (77 °F); speed of rotation: 20,0 s-1)

Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable
Oxidising properties

No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.

Reaction with strong acids.

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
3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0	LD50	5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 5.000 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
3-Ethyloxetane-3- methanol 3047-32-3	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	LD50	> 5.000 mg/kg	rat	other guideline:

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	Value	Species	Method
3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 2.000 mg/kg	rat	equivalent or similar to OECD Guideline 402 (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		
3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0	LC50	> 5,19 mg/l	dust/mist	4 h	rat	OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)

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		
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	irritating	4 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
3-Ethyloxetane-3- methanol 3047-32-3	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	not irritating	4 h	rabbit	EU Method B.4 (Acute Toxicity: Dermal Irritation / Corrosion)

$S\,erious\,eye\,damage/irritation:$

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		
Bisphenol-F	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
epichlorhydrin resin;				Irritation/Corrosion)
MW<700				
9003-36-5				
3-Ethyloxetane-3-	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
methanol				
3047-32-3				
Aromatic sulfonium	not irritating		rabbit	EU Method B.5 (Acute Toxicity: Eye Irritation/
hex afluoro antimonate				Corrosion)
159120-95-3				

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.				
3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
3-Ethyloxetane-3- methanol 3047-32-3	not sensitising		guinea pig	OECD Guideline 406 (Skin Sensitisation)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method

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
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
3-Ethyloxetane-3- methanol 3047-32-3	negative	mammalian cell gene mutation assay			OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
3-Ethyloxetane-3- methanol 3047-32-3	negative	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	negative	oral: gavage		rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	negative	oral: gavage		mouse	EU Method B.12 (Mutagenicity

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		
Bisphenol-F	NOAEL P $> 750 \text{ mg/kg}$	two-	oral: gavage	rat	OECD Guideline 416 (Two-
epichlorhydrin resin;		generation			Generation Reproduction
MW<700	NOAEL F1 750 mg/kg	study			Toxicity Study)
9003-36-5					
	NOAEL F2 750 mg/kg				

STOT-single exposure:

No data available.

$STOT\text{-}repeated\,exposure::\\$

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
3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0	NOAEL 5 mg/kg	oral: gavage	91 d daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOAEL 250 mg/kg	oral: gavage	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
3-Ethyloxetane-3- methanol 3047-32-3	NOAEL 1.000 mg/kg	oral: unspecified	28 d	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0	LC50	24 mg/l	96 h	3	OECD Guideline 203 (Fish, Acute Toxicity Test)
Bisphenol-Fepichlorhydrin resin; MW<700 9003-36-5	LC50	5,7 mg/l	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
3-Ethylox etane-3-methanol 3047-32-3	LC50	7.500 mg/l		Brachydanio rerio (new name: Danio rerio)	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				
3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0	EC50	40 mg/l	48 h		OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Bisphenol-Fepichlorhydrin resin; MW<700 9003-36-5	EC50	2,55 mg/l	48 h		OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3-Ethyloxetane-3-methanol 3047-32-3	EC50	6.910 mg/l	48 h	₁	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	EC50	0,68 mg/l	48 h		EU Method C.2 (Acute Toxicity for Daphnia)

Chronic toxicity to aquatic invertebrates

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

Haz ardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
	NOEC	0,3 mg/l	21 d	1 0	OECD 211 (Daphnia
resin; MW<700					magna, Reproduction Test)
9003-36-5					

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				
3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0	EC50	> 110 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0	NOEC	30 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Bisphenol-Fepichlorhydrin resin; MW<700 9003-36-5	EC50	1,8 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
3-Ethyloxetane-3-methanol 3047-32-3	ErC50	6.420 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	EC50	0,044 mg/l	72 h	Pseudokirchneriella subcapitata	EU Method C.3 (Algal Inhibition test)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	NOEC	0,007 mg/l	72 h	Pseudokirchneriella subcapitata	EU Method C.3 (Algal 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				
3,4-Epoxy cyclohexyl methyl-	EC10	409 mg/l	3 h	activated sludge of a	OECD Guideline 209
3,4-epoxy cyclohexyl				predominantly domestic sewage	(Activated Sludge,
carboxylate					Respiration Inhibition Test)
2386-87-0					
Bisphenol-Fepichlorhydrin	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:
resin; MW<700					
9003-36-5					

12.2. Persistence and degradability

Haz ardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
3,4-Epoxy cyclohexyl methyl-	not readily biodegradable.	aerobic	71 %	28 d	OECD Guideline 301 B (Ready
3,4-epoxy cyclohexyl					Biodegradability: CO2 Evolution
carboxylate					Test)
2386-87-0					,
Bisphenol-Fepichlorhydrin	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 D (Ready
resin; MW<700					Biodegradability: Closed Bottle
9003-36-5					Test)
Aromatic sulfonium	not readily biodegradable.	not specified	37,9 %	28 d	EU Method C.5 (Degradation:
hexafluoro antimonate					Biochemical Oxygen Demand)
159120-95-3					,

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0	1,34	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol/water), Shake Flask Method)
Bisphenol-Fepichlorhydrin resin; MW<700 9003-36-5	2,7 - 3,6		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Aromatic sulfonium hexafluoro antimonate 159120-95-3	2,61	22 °C	EU Method A.8 (Partition Coefficient)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT/vPvB
CAS-No.	
3,4-Epoxy cyclohexyl methyl-3,4-epoxy	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
cyclohexyl carboxylate	Bioaccumulative (vPvB) criteria.
2386-87-0	
Bisphenol-Fepichlorhydrin resin; MW<700	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
9003-36-5	Bioaccumulative (vPvB) criteria.
Quartz (SiO2) "respirable particulates (reaches	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not
the alveoli)" (RCS) < 0.1%	be conducted for inorganic substances.
14808-60-7	
3-Ethyloxetane-3-methanol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
3047-32-3	Bioaccumulative(vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

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

Dispose of in accordance with local and national regulations.

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.

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Not applicable

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:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H373 May cause 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.

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.

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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.