

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

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LOCTITE ECCOBOND UF 1173

SDS No. : 587592 V005.0 Revision: 21.03.2019 printing date: 15.03.2021 Replaces version from: 15.03.2018

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

- **1.1. Product identifier** LOCTITE ECCOBOND UF 1173
- **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):	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
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:



2,2'-(Phenylene)bis[oxirane]

Bisphenol-F epichlorhydrin resin; MW<700 Bisphenol F diglycidyl ether

Signal word:	Warning
Hazard statement:	H315 Causes skin irritation.H317 May cause an allergic skin reaction.H319 Causes serious eye irritation.H412 Harmful to aquatic life with long lasting effects.
Precautionary statement: Prevention	P273 Avoid release to the environment. P280 Wear protective gloves.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: 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
Bisphenol A Diglycidyl Ether 1675-54-3	216-823-5 01-2119456619-26	10- 20 %	Eye Irrit. 2 H319 Skin Irrit. 2 H315
			Skin Sens. 1 H317 Aquatic Chronic 2 H411
2,2'-(Phenylene)bis[oxirane] 30424-08-9		10- 20 %	Aquatic Chronic 2 H411 Skin Irrit. 2 H315 Skin Sens. 1 H317
2-Ethyl-4-methyl-1H-imidazole-1- propiononitrile 23996-25-0	245-975-5	1-< 3%	Acute Tox. 4; Oral H302 Skin Irrit. 2 H315 Eye Dam. 1 H318
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	01-2119454392-40	0,25- < 2,5 %	Skin Irrit. 2; Dermal H315 Skin Sens. 1A H317 Aquatic Chronic 2 H411
Bisphenol F diglycidyl ether 39817-09-9	254-641-8	0,1-< 1 %	Skin Irrit. 2; Dermal H315 Skin Sens. 1; Dermal H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411

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 EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

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: 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

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

Avoid skin and eye contact. See advice in section 8

Hygiene measures:

Good industrial hygiene practices should be observed. Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Keep container tightly sealed. Refer to Technical Data Sheet

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/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silica, vitreous 60676-86-0 [SILICA, FUSED, RESPIRABLE DUST]		0,08	Time Weighted Average (TWA):		EH40 WEL
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

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silica, vitreous 60676-86-0 [SILICA, FUSED, RESPIRABLE DUST]		0,08	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
	1		mg/l	ppm	mg/kg	others	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	aqua (freshwater)		0,006 mg/l				
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	aqua (marine water)		0,0006 mg/l				
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	sewage treatment plant (STP)		10 mg/l				
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	sediment (freshwater)				0,996 mg/kg		
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	sediment (marine water)				0,0996 mg/kg		
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	aqua (intermittent releases)		0,018 mg/l				
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	Soil				0,196 mg/kg		
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	oral				11 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	aqua (freshwater)		0,003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	aqua (marine water)		0,0003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) 9003-36-5	sewage treatment plant (STP)		10 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	sediment (freshwater)				0,294 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	sediment (marine water)				0,0294 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Soil				0,237 mg/kg		
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	aqua (intermittent releases)		0,0254 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Air						
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Predator						

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Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	Workers	dermal	Acute/short term exposure - systemic effects		8,33 mg/kg	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	Workers	inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	Workers	dermal	Long term exposure - systemic effects		8,33 mg/kg	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	Workers	inhalation	Long term exposure - systemic effects		12,25 mg/m3	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	General population	dermal	Acute/short term exposure - systemic effects		3,571 mg/kg	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	General population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	General population	dermal	Long term exposure - systemic effects		3,571 mg/kg	
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane 1675-54-3	General population	oral	Long term exposure - systemic effects		0,75 mg/kg	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Workers	dermal	Long term exposure - systemic effects		104,15 mg/kg	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Workers	Inhalation	Long term exposure - systemic effects		29,39 mg/m3	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) 9003-36-5	General population	dermal	Long term exposure - systemic effects		62,5 mg/kg	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) 9003-36-5	General population	Inhalation	Long term exposure - systemic effects		8,7 mg/m3	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	General population	oral	Long term exposure - systemic effects		6,25 mg/kg	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) 9003-36-5	Workers	dermal	Acute/short term exposure - local effects		8,3 μg/cm2	

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

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Auto-ignition temperatureNo data available / Not applicableDecomposition temperatureNo data available / Not applicableViscosity12.000 - 16.000 mPa.s(Brookfield; speed of rotation: 5 min-1)No data available / Not applicableViscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable	5 (1	Insoluble
Decomposition temperatureNo data available / Not applicableViscosity12.000 - 16.000 mPa.s(Brookfield; speed of rotation: 5 min-1)No data available / Not applicableViscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable	Partition coefficient: n-octanol/water	No data available / Not applicable
Viscosity (Brookfield; speed of rotation: 5 min-1)12.000 - 16.000 mPa.sViscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable		No data available / Not applicable
Viscosity (Brookfield; speed of rotation: 5 min-1)12.000 - 16.000 mPa.sViscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable	Decomposition temperature	No data available / Not applicable
Viscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable		12.000 - 16.000 mPa.s
Explosive properties No data available / Not applicable	(Brookfield; speed of rotation: 5 min-1)	
	Viscosity (kinematic)	No data available / Not applicable
	Explosive properties	No data available / Not applicable
Oxidising 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

Reaction with strong acids. Reacts 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	Value	Value	Species	Method
CAS-No.	type		_	
Bisphenol A Diglycidyl	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
Ether				
1675-54-3				
2,2'-	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
(Phenylene)bis[oxirane]				
30424-08-9				
2,2'-	Acute	2.500 mg/kg		Expert judgement
(Phenylene)bis[oxirane]	toxicity			
30424-08-9	estimate			
	(ATE)			
Bisphenol-F	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
epichlorhydrin resin;				
MW<700				
9003-36-5				
Bisphenol F diglycidyl	LD50	> 5.000 mg/kg	rat	
ether				
39817-09-9				

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			
Bisphenol A Diglycidyl	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Ether				
1675-54-3				
2,2'-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
(Phenylene)bis[oxirane]				
30424-08-9				
2,2'-	Acute	2.500 mg/kg		Expert judgement
(Phenylene)bis[oxirane]	toxicity			
30424-08-9	estimate			
	(ATE)			
Bisphenol-F	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
epichlorhydrin resin;				
MW<700				
9003-36-5				
Bisphenol F diglycidyl	LD50	> 6.000 mg/kg	rabbit	
ether				
39817-09-9				

Acute inhalative toxicity:

No data available.

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
2,2'- (Phenylene)bis[oxirane] 30424-08-9	irritating	15 min	Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE)	EU Method B.46 (In vitro skin irrit.: reconstructed human epidermis model test)
2,2'- (Phenylene)bis[oxirane] 30424-08-9	not corrosive	240 min	Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE)	OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/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
2,2'- (Phenylene)bis[oxirane] 30424-08-9	slightly irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

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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.				
Bisphenol A Diglycidyl	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
Ether	_	assay (LLNA)		Local Lymph Node Assay)
1675-54-3				
2,2'-	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
(Phenylene)bis[oxirane]	-	assay (LLNA)		Local Lymph Node Assay)
30424-08-9		-		
Bisphenol-F	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
epichlorhydrin resin;	· ·	assay (LLNA)		Local Lymph Node Assay)
MW<700		· · · · ·		
9003-36-5				

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)

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
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOAEL P > 750 mg/kg NOAEL F1 750 mg/kg	two- generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
5005 50 5	NOAEL F2 750 mg/kg				

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
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)

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				
	LC50	3,1 mg/l	96 h	1 1	OECD Guideline 203 (Fish,
1675-54-3					Acute Toxicity Test)
2,2'-(Phenylene)bis[oxirane]	LC50	2,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
30424-08-9					Acute Toxicity Test)
Bisphenol-F epichlorhydrin	LC50	5,7 mg/l	96 h	Leuciscus idus	OECD Guideline 203 (Fish,
resin; MW<700					Acute Toxicity Test)
9003-36-5					
Bisphenol F diglycidyl ether	LC50	> 1 - 10 mg/l	96 h	not specified	OECD Guideline 203 (Fish,
39817-09-9					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				
Bisphenol A Diglycidyl Ether	EC50	1,3 mg/l	48 h	Daphnia magna	OECD Guideline 202
1675-54-3					(Daphnia sp. Acute
					Immobilisation Test)
2,2'-(Phenylene)bis[oxirane]	EC50	1,2 mg/l	48 h	Daphnia magna	OECD Guideline 202
30424-08-9					(Daphnia sp. Acute
					Immobilisation Test)
Bisphenol-F epichlorhydrin	EC50	2,55 mg/l	48 h	Daphnia magna	OECD Guideline 202
resin; MW<700		_			(Daphnia sp. Acute
9003-36-5					Immobilisation Test)
Bisphenol F diglycidyl ether	EC50	> 1 - 10 mg/l	48 h	Daphnia magna	OECD Guideline 202
39817-09-9		_			(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 CAS-No.	Value type	Value	Exposure time	Species	Method
Bisphenol A Diglycidyl Ether 1675-54-3	NOEC	0,3 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOEC	0,3 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

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
	type EC50		72 h	Scenedesmus capricornutum	other guideline:
1675-54-3	LCJU		72 11	Sectedesinds capiteornatum	other guidenne.
Bisphenol A Diglycidyl Ether 1675-54-3	NOEC	4,2 mg/l	72 h	Scenedesmus capricornutum	other guideline:
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	1,8 mg/l	72 h	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 CAS-No.	Value type	Value	Exposure time	Species	Method
Bisphenol A Diglycidyl Ether 1675-54-3	EC50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Bisphenol A Diglycidyl Ether 1675-54-3	not inherently biodegradable	not specified	12 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Bisphenol A Diglycidyl Ether 1675-54-3	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
2,2'-(Phenylene)bis[oxirane] 30424-08-9	not readily biodegradable.	aerobic	16 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Bisphenol F diglycidyl ether 39817-09-9	not readily biodegradable.	aerobic	< 10 %	28 d	OECD 301 A - F

12.3. Bioaccumulative potential

No data available.

No substance data available.

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Bisphenol A Diglycidyl Ether	> 2,64 - 3,78	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
1675-54-3			Method)
2,2'-(Phenylene)bis[oxirane]	1,36 - 2,68		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
30424-08-9			Flask Method)
Bisphenol-F epichlorhydrin	2,7 - 3,6		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
resin; MW<700			Method)
9003-36-5			

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Bisphenol A Diglycidyl Ether	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1675-54-3 Bisphenol-F epichlorhydrin resin; MW<700	Bioaccumulative (vPvB) criteria. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
9003-36-5	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.

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:
 - H302 Harmful if swallowed.
 - H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Further information:

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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.