

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

Page 1 of 17

LOCTITE 3517M 30CC

SDS No. : 445504 V001.0 Revision: 08.04.2020 printing date: 14.04.2020 Replaces version from: -

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

- **1.1. Product identifier** LOCTITE 3517M 30CC
- **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 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 2
H411 Toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Bisphenol F diglycidyl ether

	p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700) Bisphenol-F epichlorhydrin resin; MW<700
Signal word:	Warning
Hazard statement:	H315 Causes skin irritation.H317 May cause an allergic skin reaction.H319 Causes serious eye irritation.H411 Toxic 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 F diglycidyl ether 39817-09-9	254-641-8	25- 50 %	Skin Irrit. 2; Dermal H315
55017 05 5			Skin Sens. 1
			H317
			Eye Irrit. 2
			H319
			Aquatic Chronic 2
			H411
p-tert-Butylphenyl 1-(2,3-epoxy)propyl	221-453-2	10- 20 %	Skin Sens. 1
ether	01-2119959496-20		H317
3101-60-8			Aquatic Chronic 2
			H411
reaction product: bisphenol-A-	01-2119456619-26	10- 20 %	Skin Irrit. 2
(epichlorhydrin); epoxy resin (number			H315
average molecular weight≤700)			Skin Sens. 1
25068-38-6			H317
			Eye Irrit. 2
			H319
			Aquatic Chronic 2
			H411
Bisphenol-F epichlorhydrin resin; MW<700	01-2119454392-40	1 - < 5%	Skin Irrit. 2; Dermal
9003-36-5			H315
			Skin Sens. 1A
			H317
			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

Keep away from heat and direct sunlight.

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

None

Occupational Exposure Limits

Valid for Ireland

None

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	Compartment	periou	mg/l	ppm	mg/kg	others	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	(freshwater)		0,0075 mg/l				
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	aqua (marine water)		0,00075 mg/l				
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	sewage treatment plant (STP)		100 mg/l				
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	sediment (freshwater)				33,54 mg/kg		
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	(marine water)				3,354 mg/kg		
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Soil				11,4 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (freshwater)		0,006 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (marine water)		0,001 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sewage treatment plant (STP)		10 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sediment (freshwater)				0,341 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sediment (marine water)				0,034 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Soil				0,065 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	oral				11 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (intermittent releases)		0,018 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	marine water - intermittent		0,002 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	aqua (freshwater)		0,003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	aqua (marine water)		0,0003 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	sewage treatment plant (STP)		10 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	sediment (freshwater)				0,294 mg/kg		
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 \leq 700) (old) 9003-36-5	aqua (intermittent releases)		0,0254 mg/l				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number	Air						no hazard identified

average molecular weight \leq 700) (old) 9003-36-5				
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (old) 9003-36-5	Predator			no potential for bioaccumulation

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	Long term exposure - systemic effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	Acute/short term exposure - systemic effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	Acute/short term exposure - local effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	Long term exposure - local effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	dermal	Long term exposure - systemic effects		5,6 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	dermal	Acute/short term exposure - systemic effects		8,33 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	dermal	Long term exposure - systemic effects		8,33 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	dermal	Acute/short term exposure - systemic effects		3,571 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	dermal	Long term exposure - systemic effects		3,571 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	oral	Long term exposure - systemic effects		0,75 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	inhalation	Long term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 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 \leq 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 \leq 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	Inhalation	Long term exposure - systemic effects		8,7 mg/m3	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	General population	oral	Long term exposure - systemic effects		6,25 mg/kg	no hazard identified
Reaction product: bisphenol-F- (epichlorhydrin); epoxy resin (number average molecular weight \leq 700) (old) 9003-36-5	Workers	dermal	Acute/short term exposure - local effects		8,3 μg/cm2	no hazard identified

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	mild
Odour threshold	No data available / Not applicable
рН	Not applicable
Melting point	Not available.
Solidification temperature	No data available / Not applicable
Initial boiling point	Not available.
Flash point	> 121 °C (> 249.8 °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	1,12 g/cm3
0	-

Bulk density
Solubility
Solubility (qualitative)
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Viscosity (kinematic)
Explosive properties
Oxidising properties

9.2. Other information

No data available / Not applicable

No data available / Not applicable Not available. No data available / Not applicable No data available / Not applicable

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 CAS-No.	Value type	Value	Species	Method
Bisphenol F diglycidyl ether 39817-09-9	LD50	> 5.000 mg/kg	rat	
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	LD50	> 2.000 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

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. Bisphenol F diglycidyl ether 39817-09-9	type LD50	> 6.000 mg/kg	rabbit	
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	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	OECD Guideline 402 (Acute Dermal Toxicity)

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
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	not irritating	24 h	rat	other guideline:
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test
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
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	not irritating	72 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not irritating		rabbit	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)

Page 11 of 17

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
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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)

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
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
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)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	negative	oral: gavage		mouse	not specified
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)

Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not carcinogenic	dermal	2 y daily	mouse	male	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not carcinogenic	oral: gavage	2 y daily	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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		
reaction product: bisphenol-A-	NOAEL P >= 50 mg/kg	Two generation	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction
(epichlorhydrin); epoxy resin (number average	NOAEL F1 >= 750 mg/kg	study			Toxicity Study)
molecular weight≤700) 25068-38-6	NOAEL F2 >= 750 mg/kg				
Bisphenol-F epichlorhydrin resin;	NOAEL P > 750 mg/kg	two- generation	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction
MW<700 9003-36-5	NOAEL F1 750 mg/kg	study			Toxicity Study)
	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	Species	Method
			treatment		
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOAEL 50 mg/kg	oral: gavage	14 w 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)

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				
Bisphenol F diglycidyl ether 39817-09-9	LC50	> 1 - 10 mg/l	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	LC50	7,5 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	LC50	1,75 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LC50	5,7 mg/l	96 h	Leuciscus idus	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				
Bisphenol F diglycidyl ether 39817-09-9	EC50	> 1 - 10 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	EC50	67,9 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	EC50	1,7 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	2,55 mg/l	48 h	Daphnia magna	OECD Guideline 202 (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				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOEC	0,3 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOEC	0,3 mg/l	21 d	Daphnia magna	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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	EC50	9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	EC50	> 11 mg/l	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOEC	4,2 mg/l	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	EC50	> 1.000 mg/l	3 h	predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:
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

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Bisphenol F diglycidyl ether 39817-09-9	not readily biodegradable.	aerobic	< 10 %	28 d	OECD 301 A - F
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	not readily biodegradable.	aerobic	1,1 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry 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)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	3,59	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	3,242	25 °C	EU Method A.8 (Partition Coefficient)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	2,7 - 3,6		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	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:

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.

14.1.	UN number		
	ADR	3082	
	RID	3082	
	ADN	3082	
	IMDG	3082	
	IATA	3082	
14.2.	UN proper shipping name		
	ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F diglycidyl ether)	
	RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F diglycidyl ether)	
	ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F diglycidyl ether)	
	IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F diglycidyl ether)	
	IATA	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol F diglycidyl ether)	
14.3.	Transport hazard class(es)		
	ADR	9	
	RID	9	
	ADN	9	
	IMDG	9	
	IATA	9	
14.4.	Packing group		
	ADR	III	
	RID	III	
	ADN	III	
	IMDG	III	
	IATA	III	
14.5.	Environmenta	Environmental hazards	
	ADR	not applicable	
	RID	not applicable	
	ADN	not applicable	
	IMDG	Marine pollutant	
	IATA	not applicable	
14.6.	Special precau	Special precautions for user	
	ADR	not applicable Tunnelcode:	
	RID	not applicable	
	ADN	not applicable	
	IMDG	not applicable	
	IATA	not applicable	
	1/11/1	not upprouolo	
	The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more the kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA 969 (IMDG) may be applied, which can result in a deviation from the transport classification for p goods.		

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) < 3 %

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.

H411 Toxic 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.

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.