

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

Page 1 of 16

SDS No.: 178207 V003.0

Revision: 19.02.2020

printing date: 16.03.2021

Replaces version from: 07.09.2017

LOCTITE EA 3430 DC50ML SE/FI

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

1.1. Product identifier

LOCTITE EA 3430 DC50ML SE/FI

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

Intended use: Epoxy 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:



Contains

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)

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

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: "***For consumer use only: P101 If medical advice is needed, have product

container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and

residues in accordance with local authority requirements***

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 P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

General chemical description:

Epoxy resin

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
reaction product: bisphenol-A-	01-2119456619-26	20- 40 %	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	20- 40 %	Skin Irrit. 2; Dermal
9003-36-5			H315
			Skin Sens. 1A
			H317
			Aquatic Chronic 2
			H411
Bisphenol A diglycidyl ether polymer		20- 40 %	Eye Irrit. 2
25085-99-8			H319
			Skin Irrit. 2
			H315
			Skin Sens. 1
			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 if necessary.

Ingestion

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

Seek medical advice.

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

SKIN: Rash, Urticaria.

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

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.

Do not expose to direct heat.

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

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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

Wash spillage site thoroughly with soap and water or detergent solution.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

Refer to Technical Data Sheet

7.3. Specific end use(s)

Epoxy 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

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

Name on list	Environmental Compartment	Exposure period	Value	Value			Remarks
	•	•				others	
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 ≤ 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) 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 ≤ 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

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
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 ≤ 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	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	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 ≤ 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 ≤ 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:

Tightly fitting safety goggles

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 liauid

> liquid transparent

Odor odourless

Odour threshold No data available / Not applicable

Not applicable

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

Initial boiling point $> 200 \, ^{\circ}\text{C} \, (> 392 \, ^{\circ}\text{F})$ Flash point > 100,0 °C (> 212 °F)

No data available / Not applicable Evaporation rate 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 1,17 g/cm3

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

Solubility (qualitative) Not miscible

(Solvent: Water)

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

19.000 - 25.000 mPa.s

(Cone and plate; 25 °C (77 °F); speed of

rotation: 1 min-1; Shear gradient: 10 s-1)

Viscosity (kinematic)

Explosive properties

No data available / Not applicable

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

None if used for intended purpose.

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			
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	LD50	> 2.000 mg/kg	rat	not specified

Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	LD50	> 2.000 mg/kg	rabbit	not specified

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	Result	Exposure	Species	Method
CAS-No.		time		
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700)	moderately irritating	24 h	rabbit	Draize Test
25068-38-6 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
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)

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.				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight < 700)	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
25068-38-6				
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)

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 \geq = 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
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOAEL 50 mg/kg	oral: gavage	treatment 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				
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	LC50	2 mg/l	96 h	not specified	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				
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	EC50	2 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/1	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)
Bisphenol A diglycidyl ether polymer 25085-99-8	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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	EC50	> 11 mg/l	72 h	not specified	OECD Guideline 201 (Alga, Growth Inhibition Test)
Bisphenol A diglycidyl ether polymer 25085-99-8	NOEC	4,2 mg/l	72 h	not specified	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				
reaction product: bisphenol-A-	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:
(epichlorhydrin); epoxy resin					
(number average molecular					
weight≤700)					
25068-38-6					
Bisphenol-F epichlorhydrin	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:
resin; MW<700				_	
9003-36-5					

12.2. Persistence and degradability

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
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)
Bisphenol A diglycidyl ether polymer 25085-99-8	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
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	PBT / vPvB
CAS-No.	
reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular	Bioaccumulative (vPvB) criteria.
weight≤700)	
25068-38-6	
Bisphenol-F epichlorhydrin resin; MW<700	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.

Disposal must be made according to official regulations.

Waste code

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

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

SECTION 14: Transport information

14.1. UN number

3082
3082
3082
3082
3082

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(Bisphenol-F Epichlorhydrin resin, Bisphenol-A Epichlorhydrin resin)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(Bisphenol-F Epichlorhydrin resin, Bisphenol-A Epichlorhydrin resin)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(Bisphenol-F Epichlorhydrin resin, Bisphenol-A Epichlorhydrin resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(Bisphenol-F Epichlorhydrin resin, Bisphenol-A Epichlorhydrin resin)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-F Epichlorhydrin
	marin Diambanal A Emichlanbyrdnin marin)

resin, Bisphenol-A Epichlorhydrin resin)

14.3. Transport hazard class(es)

ADR	9
RID	ç
ADN	ç
IMDG	ç
IATA	ç

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

not applicable
Tunnelcode:
not applicable
not applicable
not applicable
not applicable

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 than 5 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 packed 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 < 3,00 % (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.

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.

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



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

Page 1 of 20

SDS No.: 205861

V003.0

Revision: 19.02.2020

printing date: 16.03.2021

Replaces version from: 07.09.2017

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

1.1. Product identifier

LOCTITE EA 3430 DC50ML SE/FI

LOCTITE EA 3430 DC50ML SE/FI

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

Intended use: Epoxy Hardener

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):

Acute toxicity	Category 4
H302 Harmful if swallowed. Route of Exposure: Oral	
Route of Exposure: Oral	
Skin corrosion	Sub-category 1A
H314 Causes severe skin burns and eye damage.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
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):



Contains 2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol)

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\!\leq\! 700)$

Signal word:	Danger
Hazard statement:	H302 Harmful if swallowed.
	H314 Causes severe skin burns and eye damage.
	H317 May cause an allergic skin reaction.
	H411 Toxic to aquatic life with long lasting effects.
Precautionary statement:	"***" ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement:	P273 Avoid release to the environment.
Prevention	P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement:	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Response	Rinse skin with water [or shower].
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P310 Immediately call a POISON CENTER or doctor.

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
2,2'-[1,2- ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	239-044-2 01-2120768482-47	10- 20 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Acute Tox. 3; Oral H301 Acute Tox. 4; Inhalation H332
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	224-207-2 01-2119963377-26	5- < 10 %	Skin Corr. 1B H314 Eye Dam. 1 H318 Skin Sens. 1 H317
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine 10563-29-8	234-148-4 01-2119970376-29	5-< 10 %	Acute Tox. 4; Oral H302 Skin Corr. 1A H314 Skin Sens. 1B H317
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	01-2119456619-26	1- < 5 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411
Benzyldimethylamine 103-83-3	203-149-1 01-2119529232-48	0,1-< 1 %	Acute Tox. 4; Dermal H312 Skin Corr. 1B H314 Flam. Liq. 3 H226 Aquatic Chronic 2 H411 Acute Tox. 4; Oral H302 Acute Tox. 3; Inhalation H331

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.

In case of adverse health effects 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

Causes burns.

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:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

Do not expose to direct heat.

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.

Wear protective equipment.

Additional information:

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid skin and eye contact.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid skin and eye contact.

Use only in well-ventilated areas.

Gloves and safety glasses should be worn

Do not inhale vapors and fumes.

See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container. Store in a cool, well-ventilated place. Refer to Technical Data Sheet

7.3. Specific end use(s)

Epoxy Hardener

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		Value			
	P	F	mg/l	ppm	mg/kg	others		
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)	aqua		0,00076					
14970-87-7	(freshwater)		mg/l					
$2,2'\hbox{-}[1,2\hbox{-}Ethane diylb is (oxy)] bis (ethane thiol)$	aqua (marine		0,000076					
14970-87-7	water)		mg/l					
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)	sewage		6,74 mg/l					
14970-87-7	treatment plant (STP)							
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)	(STP) sediment				0,0047			
14970-87-7	(freshwater)				mg/kg			
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)	sediment				0,00047			
14970-87-7	(marine water)				mg/kg			
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)					0,0005			
14970-87-7					mg/kg			
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol)	aqua		0,0076					
14970-87-7	(intermittent		mg/l					
	releases)							
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	aqua		0,22 mg/l					
4246-51-9	(freshwater)							
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	aqua (marine		0,022 mg/l					
4246-51-9	water)		2.2 "	1				
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	aqua		2,2 mg/l					
4240-31-9	(intermittent releases)							
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	sewage		125 mg/l					
4246-51-9	treatment plant		123 Hig/1					
+2+0-31-7	(STP)							
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	sediment				1,1 mg/kg			
4246-51-9	(freshwater)				1,1 1119/119			
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	sediment				0,11 mg/kg			
4246-51-9	(marine water)							
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Soil				0,091			
4246-51-9					mg/kg			
$N'\hbox{-}(3-Aminopropyl)\hbox{-} N, N-dimethyl propane-$	aqua		9,2 μg/l					
1,3-diamine	(freshwater)							
10563-29-8			0.00					
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine	aqua (marine		0,92 µg/l					
10563-29-8	water)							
N'-(3-Aminopropyl)-N,N-dimethylpropane-	aqua		92 μg/l					
1,3-diamine	(intermittent)2 μg/1					
10563-29-8	releases)							
N'-(3-Aminopropyl)-N,N-dimethylpropane-	Sewage		18,1 mg/l					
1,3-diamine	treatment plant							
10563-29-8								
N'-(3-Aminopropyl)-N,N-dimethylpropane-	sediment				0,0336			
1,3-diamine	(freshwater)				mg/kg			
10563-29-8	1'				0.00226			
N'-(3-Aminopropyl)-N,N-dimethylpropane-	sediment				0,00336			
1,3-diamine 10563-29-8	(marine water)				mg/kg			
N'-(3-Aminopropyl)-N,N-dimethylpropane-	Soil				0,00132			
1,3-diamine	5011				mg/kg			
10563-29-8					mg/kg			
reaction product: bisphenol-A-	aqua		0,006 mg/l					
(epichlorhydrin)	(freshwater)							
25068-38-6			<u></u>	<u> </u>		<u> </u>		
reaction product: bisphenol-A-	aqua (marine		0,001 mg/l					
(epichlorhydrin)	water)							
25068-38-6			1.0	1				
reaction product: bisphenol-A-	sewage		10 mg/l					
(epichlorhydrin)	treatment plant							
25068-38-6	(STP) sediment		1	1	0,341			
reaction product: bisphenol-A- (epichlorhydrin)	(freshwater)				0,341 mg/kg			
25068-38-6	(IIcsiiwatei)				mg/kg			
reaction product: bisphenol-A-	sediment		+	 	0,034			
	(marine water)	İ			mg/kg	1		
(epichlorhydrin)	(marme water)				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		
Benzyldimethylamine 103-83-3	aqua (freshwater)	0,0048 mg/l		
Benzyldimethylamine 103-83-3	aqua (marine water)	0,00048 mg/l		
Benzyldimethylamine 103-83-3	aqua (intermittent releases)	0,0134 mg/l		
Benzyldimethylamine 103-83-3	sewage treatment plant (STP)	534 mg/l		
Benzyldimethylamine 103-83-3	sediment (freshwater)		0,071 mg/kg	
Benzyldimethylamine 103-83-3	sediment (marine water)		0,0071 mg/kg	
Benzyldimethylamine 103-83-3	Soil		0,0114 mg/kg	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	Workers	inhalation	Long term exposure - systemic effects		1,23 mg/m3	
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	Workers	dermal	Long term exposure - systemic effects		1,75 mg/kg	
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	General population	inhalation	Long term exposure - systemic effects		0,22 mg/m3	
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	General population	oral	Long term exposure - systemic effects		0,125 mg/kg	
2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol) 14970-87-7	General population	dermal	Long term exposure - systemic effects		0,625 mg/kg	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	Workers	inhalation	Long term exposure - systemic effects		59 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	Workers	inhalation	Acute/short term exposure - systemic effects		176 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	Workers	inhalation	Long term exposure - local effects		13 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	Workers	dermal	Long term exposure - systemic effects		8,3 mg/kg	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	inhalation	Long term exposure - systemic effects		17 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	inhalation	Acute/short term exposure - systemic effects		52 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	inhalation	Long term exposure - local effects		0,5 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	inhalation	Acute/short term exposure - local effects		6,5 mg/m3	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	dermal	Long term exposure - systemic effects		5 mg/kg	
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	General population	oral	Long term exposure - systemic effects		5 mg/kg	
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine 10563-29-8	Workers	inhalation	Long term exposure - systemic effects		0,35 mg/m3	
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine 10563-29-8	Workers	dermal	Long term exposure - systemic effects		0,05 mg/kg	
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine 10563-29-8	General population	inhalation	Long term exposure - systemic effects		0,65 mg/m3	
N'-(3-Aminopropyl)-N,N-dimethylpropane- 1,3-diamine 10563-29-8	General population	oral	Long term exposure - systemic effects		0,2 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	
Benzyldimethylamine 103-83-3	Workers	dermal	Long term exposure - systemic effects	2,3 mg/kg	
Benzyldimethylamine 103-83-3	Workers	inhalation	Long term exposure - systemic effects	14,6 mg/m3	
Benzyldimethylamine 103-83-3	Workers	inhalation	Long term exposure - local effects	1 mg/m3	
Benzyldimethylamine 103-83-3	General population	dermal	Long term exposure - systemic effects	1,25 mg/kg	
Benzyldimethylamine 103-83-3	General population	oral	Long term exposure - systemic effects	1,25 mg/kg	
Benzyldimethylamine 103-83-3	General population	inhalation	Long term exposure - systemic effects	43,75 mg/m3	

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 Clear

Odor characteristic

Odour threshold No data available / Not applicable

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

 $> 230 \, ^{\circ}\text{C} \, (> 446 \, ^{\circ}\text{F})$ Initial boiling point

> 100,0 °C (> 212 °F); no method Flash point Evaporation rate No data available / Not applicable Flammability No data available / Not applicable No data available / Not applicable Explosive limits

Vapour pressure < 700 mbar

(50 °C (122 °F))

Relative vapour density: No data available / Not applicable

Density 1,1 g/cm3

()

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

Solubility (qualitative) Soluble

(Solvent: Acetone)

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

Viscosity 19.000 - 26.000 mPa.s

(Cone and plate; 25 °C (77 °F); Shear gradient:

10 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

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

No decomposition if used according to specifications. Avoid contact with acids and oxidizing agents. Avoid contact with water.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

None if used for intended purpose.

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			
2,2'-[1,2-	LD50	> 50 - 300	rat	OECD Guideline 423 (Acute Oral toxicity)
ethanediylbis(oxy)]bis(eth		mg/kg		
anethiol)				
14970-87-7				
3,3'-	LD50	3.160 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Oxybis(ethyleneoxy)bis(p				
ropylamine)				
4246-51-9				
N'-(3-Aminopropyl)-N,N-	LD50	1.669 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
dimethylpropane-1,3-				
diamine				
10563-29-8				
reaction product:	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
bisphenol-A-				
(epichlorhydrin); epoxy				
resin (number average				
molecular weight≤700)				
25068-38-6				
Benzyldimethylamine	LD50	353 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
103-83-3				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.	type			
2,2'-[1,2-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
ethanediylbis(oxy)]bis(eth				
anethiol)				
14970-87-7				
3,3'-	Acute	2.500 mg/kg		Expert judgement
Oxybis(ethyleneoxy)bis(p	toxicity			
ropylamine)	estimate			
4246-51-9	(ATE)	2.150 7		0707 G 11 II 402 (1 P 17 1
3,3'-	LD50	> 2.150 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Oxybis(ethyleneoxy)bis(p				
ropylamine) 4246-51-9				
	LD50	> 2.000 mg/lra	not	OECD Guideline 402 (Acute Dermal Toxicity)
reaction product: bisphenol-A-	LD30	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Definal Toxicity)
(epichlorhydrin); epoxy				
resin (number average				
molecular weight≤700)				
25068-38-6				
Benzyldimethylamine	LD50	1.477 mg/kg	rabbit	not specified
103-83-3				·

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		
2,2'-[1,2-	LC50	1,34 mg/l	dust/mist	4 h	rat	not specified
ethanediylbis(oxy)]bis(eth						
anethiol)						
14970-87-7						
Benzyldimethylamine	LC50	2,052 mg/l	vapour	4 h	rat	not specified
103-83-3			=			_

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		
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test

Serious eye damage/irritation:

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

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
reaction product:	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
bisphenol-A-				
(epichlorhydrin); epoxy				
resin (number average				
molecular weight≤700)				
25068-38-6				

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.				
2,2'-[1,2-	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
ethanediylbis(oxy)]bis(eth		test		
anethiol)				
14970-87-7				
reaction product:	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
bisphenol-A-		assay (LLNA)		Local Lymph Node Assay)
(epichlorhydrin); epoxy				
resin (number average				
molecular weight≤700)				
25068-38-6				

Germ cell mutagenicity:

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

Hazardous substances	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of	activation /		
		administration	Exposure time		
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	negative	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	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)

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 CAS-No.	Result / Value	Test type	Route of application	Species	Method
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	NOAEL P 600 mg/kg	screening	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOAEL P >= 50 mg/kg NOAEL F1 >= 750 mg/kg NOAEL F2 >= 750 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

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	Result / Value	Route of	Exposure time /	Species	Method
CAS-No.		application	Frequency of		
			treatment		
3,3'-	NOAEL < 100 mg/kg	oral: gavage	59 days	rat	OECD Guideline 422
Oxybis(ethyleneoxy)bis(p			daily		(Combined Repeated
ropylamine)					Dose Toxicity Study with
4246-51-9					the Reproduction /
					Developmental Toxicity
					Screening Test)
reaction product:	NOAEL 50 mg/kg	oral: gavage	14 w	rat	OECD Guideline 408
bisphenol-A-			daily		(Repeated Dose 90-Day
(epichlorhydrin); epoxy					Oral Toxicity in Rodents)
resin (number average					
molecular weight≤700)					
25068-38-6					

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				
ethanediylbis(oxy)]bis(ethanet	LC50	5,7 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
hiol) 14970-87-7					
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	LC50	> 215 - 464 mg/l	96 h	Leuciscus idus	DIN 38412-15
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)
Benzyldimethylamine 103-83-3	LC50	37,8 mg/l	96 h	Pimephales promelas	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				
2,2'-[1,2-	EC50	0,76 mg/l	48 h	Daphnia magna	OECD Guideline 202
ethanediylbis(oxy)]bis(ethanet					(Daphnia sp. Acute
hiol)					Immobilisation Test)
14970-87-7					
3,3'-	EC50	218 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute
Oxybis(ethyleneoxy)bis(propy					Toxicity for Daphnia)
lamine)					
4246-51-9					
N'-(3-Aminopropyl)-N,N-	EC50	9,2 mg/l	48 h	Daphnia magna	OECD Guideline 202
dimethylpropane-1,3-diamine					(Daphnia sp. Acute
10563-29-8					Immobilisation Test)
reaction product: bisphenol-A-	EC50	1,7 mg/l	48 h	Daphnia magna	OECD Guideline 202
(epichlorhydrin); epoxy resin					(Daphnia sp. Acute
(number average molecular					Immobilisation Test)
weight≤700)					
25068-38-6					
Benzyldimethylamine	EC50	> 100 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute
103-83-3					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.

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)
Benzyldimethylamine 103-83-3	NOEC	0,789 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				
2,2'-[1,2- ethanediylbis(oxy)]bis(ethanet hiol) 14970-87-7	EC50	3,11 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-[1,2- ethanediylbis(oxy)]bis(ethanet hiol) 14970-87-7	EC10	0,51 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	EC50	666 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	NOEC	15,6 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
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)
Benzyldimethylamine 103-83-3	EC50	1,34 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Benzyldimethylamine 103-83-3	NOEC	0,24 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	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				
2,2'-[1,2- ethanediylbis(oxy)]bis(ethanet hiol) 14970-87-7	EC50	772,1 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	EC10	152,5 mg/l	17 h		DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- 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:
Benzyldimethylamine 103-83-3	EC10	534 mg/l	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
2,2'-[1,2- ethanediylbis(oxy)]bis(ethanet hiol) 14970-87-7	not readily biodegradable.	aerobic	< 10 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	not inherently biodegradable	aerobic	< 20 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
3,3'- Oxybis(ethyleneoxy)bis(propy lamine) 4246-51-9	not readily biodegradable.	aerobic	0 %	60 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine 10563-29-8	readily biodegradable		100 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away 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)
Benzyldimethylamine 103-83-3	not readily biodegradable.	aerobic	0 - 2 %	28 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Benzyldimethylamine	> 2,1 - 22	42 d		Cyprinus carpio	OECD Guideline 305 C
103-83-3					(Bioaccumulation: Test for the
					Degree of Bioconcentration in
					Fish)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.		_	
2,2'-[1,2-	1,66	55 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
ethanediylbis(oxy)]bis(ethanet			Method)
hiol)			
14970-87-7			
3,3'-	-1,25	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
Oxybis(ethyleneoxy)bis(propy			Flask Method)
lamine)			
4246-51-9			
N'-(3-Aminopropyl)-N,N-	-0,47	25 °C	other (calculated)
dimethylpropane-1,3-diamine			
10563-29-8			
reaction product: bisphenol-A-	3,242	25 °C	EU Method A.8 (Partition Coefficient)
(epichlorhydrin); epoxy resin			
(number average molecular			
weight≤700)			
25068-38-6			
Benzyldimethylamine	1,98		EU Method A.8 (Partition Coefficient)
103-83-3			

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol)	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
14970-87-7	Bioaccumulative (vPvB) criteria.
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4246-51-9	Bioaccumulative (vPvB) criteria.
N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
diamine	Bioaccumulative (vPvB) criteria.
10563-29-8	
reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular	Bioaccumulative (vPvB) criteria.
weight≤700)	
25068-38-6	
Benzyldimethylamine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
103-83-3	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

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

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

ADR 2735 RID 2735 ADN 2735 IMDG 2735 IATA 2735

14.2. UN proper shipping name

ADR AMINES, LIQUID, CORROSIVE, N.O.S. (N,N'-Dimethyldipropyltriamine,3,3'-

oxybis(ethyleneoxy)bis(propylamine))

RID AMINES, LIQUID, CORROSIVE, N.O.S. (N,N'-Dimethyldipropyltriamine,3,3'-

oxybis(ethyleneoxy)bis(propylamine))

ADN AMINES, LIQUID, CORROSIVE, N.O.S. (N,N'-Dimethyldipropyltriamine,3,3'-

oxybis(ethyleneoxy)bis(propylamine))

IMDG AMINES, LIQUID, CORROSIVE, N.O.S. (N,N'-Dimethyldipropyltriamine,3,3'-

oxybis(ethyleneoxy)bis(propylamine),2,2'-[1,2-Ethanediylbis(oxy)]bis(ethanethiol))

IATA Amines, liquid, corrosive, n.o.s. (N,N'-Dimethyldipropyltriamine,3,3'-

oxybis(ethyleneoxy)bis(propylamine))

14.3. Transport hazard class(es)

ADR 8 RID 8 ADN 8 IMDG 8 IATA 8

14.4. Packing group

ADR II
RID II
ADN II
IMDG II
IATA II

14.5. Environmental hazards

ADR Environmentally Hazardous RID Environmentally Hazardous ADN Environmentally Hazardous

IMDG Marine pollutant IATA not applicable

14.6. Special precautions for user

ADR not applicable
Tunnelcode: (E)
RID not applicable
ADN not applicable
IMDG not applicable
IATA not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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:

H226 Flammable liquid and vapor.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

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.

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.