

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

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SDS No.: 196266

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

1.1. Product identifier

LOCTITE EA 3479 known as Loctite 3479A&B HYSOL/Loctite

LOCTITE EA 3479 known as Loctite 3479A&B HYSOL/Loctite

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

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

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:



RP Bisphenol F-epichlorohydrin resin, MW<=700 Contains

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

weight≤700)

1,3-Propanediol, 2,2-bis(hydroxymethyl)-, polymer with (chloromethyl)oxirane

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: P273 Avoid release to the environment.

Prevention P280 Wear protective gloves.

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

Response 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	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
RP Bisphenol F-epichlorohydrin resin,		25- 50 %	Skin Irrit. 2
MW<=700			H315
28064-14-4			Skin Sens. 1A
			H317
			Eye Irrit. 2
			H319
			Aquatic Chronic 2
			H411
reaction product: bisphenol-A-	01-2119456619-26	10- 25 %	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
1,3-Propanediol, 2,2-bis(hydroxymethyl)-,		2,5- 10 %	Skin Irrit. 2
polymer with (chloromethyl)oxirane			H315
30973-88-7			Eye Irrit. 2
			H319
			Skin Sens. 1
			H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. 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:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In 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.

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

Refer to Technical Data Sheet

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

None

Occupational Exposure Limits

Valid for

Ireland

None

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	_		mg/l	ppm	mg/kg	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				

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	

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

Odor characteristic

Odour threshold No data available / Not applicable

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

> 100 °C (> 212 °F) Initial boiling point Flash point $> 110 \, ^{\circ}\text{C} \, (> 230 \, ^{\circ}\text{F})$

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 No data available / Not applicable Relative vapour density:

Density 1,6 g/cm3

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

Solubility (qualitative) Insoluble

(Solvent: Water) Partition coefficient: n-octanol/water No data available / Not applicable Auto-ignition temperature No data available / Not applicable No data available / Not applicable Decomposition temperature No data available / Not applicable Viscosity Viscosity (kinematic) No data available / Not applicable Explosive properties No data available / Not applicable No data available / Not applicable

9.2. Other information

Oxidising properties

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

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

Hazardous substances CAS-No.	Value	Value	Species	Method
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
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)

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			
RP Bisphenol F-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
epichlorohydrin resin,				
MW<=700				
28064-14-4				
reaction product:	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
bisphenol-A-				
(epichlorhydrin); epoxy				
resin (number average				
molecular weight≤700)				
25068-38-6				

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	irritating	4 h	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.				
RP Bisphenol F-	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
epichlorohydrin resin,		assay (LLNA)		Local Lymph Node Assay)
MW<=700				
28064-14-4				
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 CAS-No.	Result	Type of study / Route of administration	Metabolic activation /	Species	Method
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	positive	bacterial reverse mutation assay (e.g Ames test)	exposure time 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	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
RP Bisphenol F-	NOAEL P > 750 mg/kg	two-	oral: gavage	rat	OECD Guideline 416 (Two-
epichlorohydrin resin,		generation			Generation Reproduction
MW<=700	NOAEL F1 750 mg/kg	study			Toxicity Study)
28064-14-4					
	NOAEL F2 750 mg/kg				
reaction product:	NOAEL $P >= 50 \text{ mg/kg}$	Two	oral: gavage	rat	OECD Guideline 416 (Two-
bisphenol-A-		generation			Generation Reproduction
(epichlorhydrin); epoxy	NOAEL F1 $>= 750 \text{ mg/kg}$	study			Toxicity Study)
resin (number average		-			
molecular weight≤700)	NOAEL F2 $>= 750 \text{ mg/kg}$				
25068-38-6					

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		
RP Bisphenol F-	NOAEL 250 mg/kg	oral: gavage	13 w	rat	OECD Guideline 408
epichlorohydrin resin,			daily		(Repeated Dose 90-Day
MW<=700					Oral Toxicity in Rodents)
28064-14-4					
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				
RP Bisphenol F-	LC50	5,7 mg/l	96 h	Ide, silver or golden orfe	OECD Guideline 203 (Fish,
epichlorohydrin resin,				(Leuciscus idus)	Acute Toxicity Test)
MW<=700					
28064-14-4					
reaction product: bisphenol-A-	LC50	1,75 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
(epichlorhydrin); epoxy resin					Acute Toxicity Test)
(number average molecular					
weight≤700)					
25068-38-6					

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
RP Bisphenol F- epichlorohydrin resin,	EC50	3,5 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute
MW<=700					Immobilisation Test)
28064-14-4					
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	EC50	1,7 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute
(number average molecular					Immobilisation Test)
weight≤700)					
25068-38-6					

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				
RP Bisphenol F- epichlorohydrin resin,	NOEC	0,3 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
MW<=700					magna, reproduction rest)
28064-14-4					
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	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				
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	EC50	9,4 mg/l	72 h	Selenastrum capricornutum (new name: 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		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		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				
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	IC50	> 100 mg/l	3 h		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:

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
RP Bisphenol F-	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready
epichlorohydrin resin,					Biodegradability: Manometric
MW<=700					Respirometry Test)
28064-14-4					
reaction product: bisphenol-A-	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready
(epichlorhydrin); epoxy resin					Biodegradability: Manometric
(number average molecular					Respirometry Test)
weight≤700)					
25068-38-6					ļ

12.3. Bioaccumulative potential

No data available.

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
RP Bisphenol F-	31			not specified	not specified
epichlorohydrin resin,					
MW<=700					
28064-14-4					

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	3,242		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC 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)

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	

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

ADR	3082
RID	3082
ADN	3082
IMDG	3082
IATA	3082

14.2. UN proper shipping name

	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.	
ADR		

(Bisphenol-A Epichlorhydrin resin)

RID ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Bisphenol-A Epichlorhydrin resin)

ADN ENVIRONMENTALLÝ HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Bisphenol-A Epichlorhydrin resin)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Bisphenol-A Epichlorhydrin resin)

IATA Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin

resin)

14.3. Transport hazard class(es)

ADR	ç
RID	ç
ADN	ç
IMDG	ç
IATA	C

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

ADR	not applicable
	Tunnelcode:
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	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 % Combined A/B (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.

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



Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 23

SDS No.: 173488

V002.0

Revision: 13.05.2020

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Replaces version from: 06.09.2019

LOCTITE EA 3479 known as Loctite 3479A&B HYSOL/Loctite

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

1.1. Product identifier

LOCTITE EA 3479 known as Loctite 3479A&B HYSOL/Loctite

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 Adhesives 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 corrosion Sub-category 1B

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.

2.2. Label elements

Label elements (CLP):



Contains Isophorone diamine

	N-(3-(Trimethoxysilyl)propyl)ethylenediamine
	C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer
	N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)
	Formaldehyde, polymer with benzenamine, hydrogenated
Signal word:	Danger
Hazard statement:	H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.
Precautionary statement: Prevention	P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement: Response	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. 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
Isophorone diamine 2855-13-2	220-666-8 01-2119514687-32	10- 25 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Corr. 1B H314 Skin Sens. 1A H317 Aquatic Chronic 3
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	500-191-5 01-2119972320-44	<= 2,5 %	H412 Skin Irrit. 2 H315 Eye Dam. 1 H318 Skin Sens. 1A H317 Aquatic Chronic 2 H411
benzyl alcohol 100-51-6	202-859-9 01-2119492630-38	<= 2,5 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Inhalation H332 Eye Irrit. 2 H319
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	217-164-6 01-2119970215-39	<= 2,5 %	Skin Sens. 1 H317 Eye Dam. 1 H318 Acute Tox. 4; Inhalation H332 STOT RE 2; Inhalation H373
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	01-2119983522-33	<= 2,5 %	Acute Tox. 4; Oral H302 Skin Corr. 1C H314 STOT RE 2 H373 Aquatic Chronic 3 H412 Eye Dam. 1 H318 Skin Sens. 1 H317
Salicylic acid 69-72-7	200-712-3 01-2119486984-17	<= 2,5 %	Eye Dam. 1 H318 Acute Tox. 4; Oral H302 Repr. 2 H361d
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2	204-613-6 01-2119978265-26	<= 2,5 %	Skin Sens. 1B H317 Aquatic Chronic 4 H413
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	202-013-9 01-2119560597-27	<= 2,5 %	Skin Corr. 1C H314 Acute Tox. 4; Oral H302 Eye Dam. 1 H318

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

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

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:

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

Ensure adequate ventilation.

Avoid skin and eye contact.

Wear protective equipment.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Scrape up spilled material and place in a closed container for disposal.

Wear protective clothing, gloves and safety glasses.

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:

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

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		Value				Remarks
	Compartment	period	a/I		ma/lva	othona	
3-Aminomethyl-3,5,5-	aqua		mg/l 0,06 mg/l	ppm	mg/kg	others	
trimethylcyclohexylamine	(freshwater)		0,00 mg/1				
2855-13-2	(
3-Aminomethyl-3,5,5-	aqua (marine		0,006 mg/l				
trimethylcyclohexylamine	water)						
2855-13-2							
3-Aminomethyl-3,5,5-	aqua		0,23 mg/l				
trimethylcyclohexylamine	(intermittent						
2855-13-2	releases)						
3-Aminomethyl-3,5,5-	sediment				5,784		
trimethylcyclohexylamine	(freshwater)				mg/kg		
2855-13-2 3-Aminomethyl-3,5,5-	sediment				0.578		
trimethylcyclohexylamine	(marine water)				mg/kg		
2855-13-2	(marme water)				mg/kg		
3-Aminomethyl-3,5,5-	Soil				1,121		
trimethylcyclohexylamine	5011				mg/kg		
2855-13-2					8 8		
3-Aminomethyl-3,5,5-	sewage		3,18 mg/l				
trimethylcyclohexylamine	treatment plant						
2855-13-2	(STP)						
C18 Fatty acid dimer, tall oil fatty acid,	aqua		0,00434				
triethylenetetramine polymer	(freshwater)		mg/l				
68082-29-1							
C18 Fatty acid dimer, tall oil fatty acid,	aqua (marine		0,00043				
triethylenetetramine polymer	water)		mg/l				
68082-29-1 C18 Fatty acid dimer, tall oil fatty acid,			0,0434				
triethylenetetramine polymer	aqua (intermittent		mg/l				
68082-29-1	releases)		IIIg/1				
C18 Fatty acid dimer, tall oil fatty acid,	sewage		3,84 mg/l				
triethylenetetramine polymer	treatment plant		5,0 1 mg/1				
68082-29-1	(STP)						
C18 Fatty acid dimer, tall oil fatty acid,	sediment				434,02		
triethylenetetramine polymer	(freshwater)				mg/kg		
68082-29-1							
C18 Fatty acid dimer, tall oil fatty acid,	sediment				43,4 mg/kg		
triethylenetetramine polymer	(marine water)						
68082-29-1	0.11				0.5.70		
C18 Fatty acid dimer, tall oil fatty acid,	Soil				86,78		
triethylenetetramine polymer 68082-29-1					mg/kg		
Benzyl alcohol	Soil				0,456		
100-51-6	3011				mg/kg		
Benzyl alcohol	sewage		39 mg/l		mg/kg		
100-51-6	treatment plant		37 mg/1				
	(STP)						
Benzyl alcohol	sediment				5,27 mg/kg		
100-51-6	(freshwater)						
Benzyl alcohol	sediment				0,527		
100-51-6	(marine water)				mg/kg		
Benzyl alcohol	aqua (marine		0,1 mg/l		_	1	
100-51-6	water)		1	ļ			
Benzyl alcohol	aqua		2,3 mg/l				
100-51-6	(intermittent						
Dengyl sleekel	releases)		1 m a /1				
Benzyl alcohol 100-51-6	aqua (freshwater)		1 mg/l				
Benzyl alcohol	(freshwater) Air		+	1			no hazard identified
100-51-6	ZIII						no nazaru iuchiliteu
Benzyl alcohol	Predator		+	1			no potential for
100-51-6	1100001						bioaccumulation
N-(3-	aqua		0,062 mg/l				o constantial and the cons
(Trimethoxysilyl)propyl)ethylenediamine	(freshwater)						
1760-24-3	<u> </u>						
N-(3-	aqua (marine		0,0062				
(Trimethoxysilyl)propyl)ethylenediamine	water)		mg/l				
1760-24-3							

1 1	lo co a l	1	1
	0,62 mg/l		
`			
/		0.22 mg/kg	
(freshwater)		0,22	
sediment		0,022	
(marine water)		mg/kg	
Soil		0,0085	
		mg/kg	
sewage	25 mg/l		
	0.015 mg/l		
(freshwater)	0,010 mg1		
aqua (marine	0,002 mg/l		
water)			
aqua	0,15 mg/l		
releases)			
	1,9 mg/l		
sediment		15 mg/kg	
(freshwater)			
sediment		1,5 mg/kg	
(marine water)			
Soil		1,8 mg/kg	
(freshwater)			
aqua (marine water)			
aqua	1 mg/l		
sewage	162 mg/l		
treatment plant (STP)			
sediment		1,42 mg/kg	
(freshwater)		0.112	
	0.084 mg/l	mg/kg	
	0,004 1118/1		
aqua (marine	0,0084 mg/l		
aqua			
(intermittent releases)			
sewage	0,2 mg/l		
treatment plant (STP)			
	sediment (marine water) Soil sewage treatment plant (STP) aqua (freshwater) aqua (marine water) aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) Soil aqua (marine water) Soil aqua (freshwater) aqua (marine water) aqua (marine water) sewage treatment plant (STP) sediment (freshwater) sediment (reshwater) aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) sediment (freshwater) sediment (marine water) Soil aqua (freshwater) aqua (marine water) sediment (marine water)	(intermittent releases) sediment (freshwater) sediment (marine water) Soil sewage treatment plant (STP) aqua (marine water) aqua (intermittent releases) sediment (freshwater) aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) sediment (marine water) Soil aqua (marine water) sediment (freshwater) aqua (marine water) sediment (marine water) Soil aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) aqua (intermittent releases) sewage treatment plant (STP) sediment (freshwater) sediment (freshwater) sediment (freshwater) sediment (freshwater) sediment (marine water) Soil aqua (intermittent releases) sewage treatment plant (STP) aqua (intermittent releases) sewage treatment plant (STP) aqua (intermittent releases)	(intermittent releases) sediment (freshwater) sediment (freshwater) 0,22 mg/kg sediment (marine water) 0,0022 mg/kg Soil 0,0085 mg/kg sewage treatment plant (STP) 0,015 mg/l (freshwater) 0,015 mg/l aqua (marine water) 0,002 mg/l aqua (intermittent releases) 1,9 mg/l sewage treatment plant (STP) 15 mg/kg sediment (freshwater) 1,5 mg/kg sediment (marine water) 0,2 mg/l Soil 1,8 mg/kg aqua (freshwater) 1 mg/l aqua (marine water) 1 mg/l sewage treatment plant (STP) 1,42 mg/kg sewage treatment plant (freshwater) 1,42 mg/kg sediment (freshwater) 0,142 mg/kg sediment (freshwater) 0,142 mg/kg sediment (freshwater) 0,0084 mg/l aqua (marine water) 0,0084 mg/l Soil 0,0084 mg/l intermittent releases) 0,2 mg/l

$\ \, \textbf{Derived No-Effect Level (DNEL):} \\$

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
3-Aminomethyl-3,5,5- trimethylcyclohexylamine	Workers	inhalation	Long term exposure - local effects		0,073 mg/m3	
2855-13-2 3-Aminomethyl-3,5,5- trimethylcyclohexylamine	Workers	inhalation	Acute/short term exposure - local		0,073 mg/m3	
2855-13-2 3-Aminomethyl-3,5,5- trimethylcyclohexylamine	General population	oral	Long term exposure -		0,526 mg/kg	
2855-13-2 C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	Workers	inhalation	systemic effects Long term exposure -		3,9 mg/m3	
68082-29-1 C18 Fatty acid dimer, tall oil fatty acid,	Workers	dermal	systemic effects Long term		1,1 mg/kg	
triethylenetetramine polymer 68082-29-1 C18 Fatty acid dimer, tall oil fatty acid,	General	inhalation	exposure - systemic effects		0.07 m g/m2	
triethylenetetramine polymer 68082-29-1	population	inhalation	Long term exposure - systemic effects		0,97 mg/m3	
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	General population	dermal	Long term exposure - systemic effects		0,56 mg/kg	
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	General population	oral	Long term exposure - systemic effects		0,56 mg/kg	
Benzyl alcohol 100-51-6	General population	oral	Acute/short term exposure - systemic effects		20 mg/kg	no hazard identified
Benzyl alcohol 100-51-6	General population	oral	Long term exposure - systemic effects		4 mg/kg	no hazard identified
Benzyl alcohol 100-51-6	Workers	inhalation	Acute/short term exposure - systemic effects		110 mg/m3	no hazard identified
Benzyl alcohol 100-51-6	Workers	inhalation	Long term exposure - systemic effects		22 mg/m3	no hazard identified
Benzyl alcohol 100-51-6	General population	inhalation	Acute/short term exposure - systemic effects		27 mg/m3	no hazard identified
Benzyl alcohol 100-51-6	General population	inhalation	Long term exposure - systemic effects		5,4 mg/m3	no hazard identified
Benzyl alcohol 100-51-6	Workers	dermal	Acute/short term exposure - systemic effects		40 mg/kg	no hazard identified
Benzyl alcohol 100-51-6	Workers	dermal	Long term exposure - systemic effects		8 mg/kg	no hazard identified
Benzyl alcohol 100-51-6	General population	dermal	Acute/short term exposure - systemic effects		20 mg/kg	no hazard identified
Benzyl alcohol 100-51-6	General population	dermal	Long term exposure - systemic effects		4 mg/kg	no hazard identified
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Workers	inhalation	Long term exposure - systemic effects		35,3 mg/m3	
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Workers	dermal	Long term exposure - systemic effects		5 mg/kg	
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Workers	dermal	Acute/short term exposure - systemic effects		5 mg/kg	
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	General population	inhalation	Long term exposure - systemic effects		8,7 mg/m3	
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	

N-(3- (Trimethoxysilyl)propyl)ethylenediamine	General population	oral	Long term exposure -	2,5 mg/kg	
1760-24-3	1 1		systemic effects		
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	General population	dermal	Acute/short term exposure - systemic effects	17 mg/kg	
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Workers	inhalation	Long term exposure - systemic effects	0,2 mg/m3	
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Workers	inhalation	Acute/short term exposure - systemic effects	2 mg/m3	
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Workers	dermal	Long term exposure - systemic effects	2 mg/kg	
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Workers	dermal	Acute/short term exposure - systemic effects	6 mg/kg	
Salicylic acid 69-72-7	Workers	dermal	Long term exposure - systemic effects	2,3 mg/kg	
Salicylic acid 69-72-7	Workers	inhalation	Long term exposure - systemic effects	5 mg/m3	
Salicylic acid 69-72-7	General population	oral	Acute/short term exposure - systemic effects	4 mg/kg	
Salicylic acid 69-72-7	General population	dermal	Long term exposure - systemic effects	1 mg/kg	
Salicylic acid 69-72-7	General population	inhalation	Long term exposure - systemic effects	4 mg/m3	
Salicylic acid 69-72-7	General population	oral	Long term exposure - systemic effects	1 mg/kg	
Salicylic acid 69-72-7	Workers	inhalation	Long term exposure - local effects	5 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 past

solid white

Odor amine-like

Odour threshold No data available / Not applicable

pH > 10

 $(20~^{\circ}\mathrm{C}~(68~^{\circ}\mathrm{F}))$

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 $> 100 \,^{\circ}\text{C} (> 212 \,^{\circ}\text{F})$

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

Density 2,20 g/cm3

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Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Not miscible

(Solvent: Water)

Solubility (qualitative) Soluble

(Solvent: organic solvent)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

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

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable
Oxidising properties

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

9.2. Other information

Ignition temperature $> 300 \,^{\circ}\text{C} (> 572 \,^{\circ}\text{F})$

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with water: generation of heat.

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

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Isophorone diamine	LD50	1.030 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2855-13-2				
C18 Fatty acid dimer, tall	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
oil fatty acid,				
triethylenetetramine				
polymer				
68082-29-1				
benzyl alcohol	LD50	1.620 mg/kg	rat	not specified
100-51-6				
N-(3-	LD50	2.295 mg/kg	rat	EPA OPPTS 870.1100 (Acute Oral Toxicity)
(Trimethoxysilyl)propyl)e				
thylenediamine 1760-24-3				
Salicylic acid	LD50	891 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
69-72-7	LD30	891 Hig/Kg	rat	Toxicity)
N,N'-Ethane-1,2-	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
diylbis(12-	LD30	> 2.000 mg/kg	Tat	OECD Guideline 423 (Acute Ofai toxicity)
hydroxyoctadecan-1-				
amide)				
123-26-2				
2,4,6-	LD50	1.200 mg/kg	rat	not specified
tris(dimethylaminomethyl				•
)phenol				
90-72-2				

Acute dermal toxicity:

Hazardous substances CAS-No.	Value type	Value	Species	Method
Isophorone diamine 2855-13-2	Acute toxicity estimate (ATE)	2.000 mg/kg		Expert judgement
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
benzyl alcohol 100-51-6	Acute toxicity estimate (ATE)	2.500 mg/kg		Expert judgement
N-(3- (Trimethoxysilyl)propyl)e thylenediamine 1760-24-3	LD50	> 2.000 mg/kg	rat	EPA OPPTS 870.1200 (Acute Dermal Toxicity)
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Acute toxicity estimate (ATE)	> 2.000 mg/kg	rabbit	Expert judgement
Salicylic acid 69-72-7	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	_	Species	Method
CAS-No.	type			time		
Isophorone diamine	LC50	> 5,01 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
2855-13-2						Inhalation Toxicity)
Isophorone diamine	Acute	5,011 mg/l				Expert judgement
2855-13-2	toxicity	_				
	estimate					
	(ATE)					
benzyl alcohol	Acute	4,17 mg/l	dust/mist			Expert judgement
100-51-6	toxicity	_				
	estimate					
	(ATE)					
benzyl alcohol	LC50	> 4,178 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
100-51-6						Inhalation Toxicity)
N-(3-	LC50	1,49 - 2,44 mg/l	dust/mist	4 h	rat	EPA OPPTS 870.1300 (Acute
(Trimethoxysilyl)propyl)e						inhalation toxicity)
thylenediamine						•
1760-24-3						
Salicylic acid	Acute	5,1 mg/l	dust/mist			Expert judgement
69-72-7	toxicity	_				
	estimate					
	(ATE)					

Skin corrosion/irritation:

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
C18 Fatty acid dimer, tall	irritating		In vitro	OECD Guideline 439 (In Vitro Skin Irritation:
oil fatty acid,				Reconstructed Human Epidermis (RHE) Test Method)
triethylenetetramine				
polymer				
68082-29-1				
benzyl alcohol	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
100-51-6				
Formaldehyde, polymer	Category 1C		Corrositex	OECD Guideline 435 (In Vitro Membrane Barrier Test
with benzenamine,	(corrosive)		Biobarrier	Method for Skin Corrosion)
hydrogenated			Membrane	
135108-88-2			(reconstituted	
			collagen matrix)	
Salicylic acid	slightly		rabbit	not specified
69-72-7	irritating			
2,4,6-	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
tris(dimethylaminomethyl				
)phenol				
90-72-2				

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	_	
Isophorone diamine 2855-13-2	corrosive		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
benzyl alcohol 100-51-6	irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
N-(3- (Trimethoxysilyl)propyl)e thylenediamine 1760-24-3	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Salicylic acid 69-72-7	highly irritating		rabbit	Draize Test

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.				
Isophorone diamine	sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
2855-13-2		test		
C18 Fatty acid dimer, tall	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
oil fatty acid,		assay (LLNA)		Local Lymph Node Assay)
triethylenetetramine				
polymer				
68082-29-1				OF GD G 11 11 420 (G11 G 11 11
benzyl alcohol	not sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
100-51-6	.,	assay (LLNA)		Local Lymph Node Assay)
N-(3-	sensitising	Mouse local lymphnode	guinea pig	OECD Guideline 429 (Skin Sensitisation:
(Trimethoxysilyl)propyl)e		assay (LLNA)		Local Lymph Node Assay)
thylenediamine 1760-24-3				
Formaldehyde, polymer	sensitising	Buehler test	guinea pig	Buehler test
with benzenamine,	sensiusing	Bueiller test	guillea pig	Bueiller test
hydrogenated				
135108-88-2				
2,4,6-	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
tris(dimethylaminomethyl	Į.			, , , , , , , , , , , , , , , , , , ,
)phenol				
90-72-2				
2,4,6-	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
tris(dimethylaminomethyl		test		
)phenol				
90-72-2				

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
Isophorone diamine 2855-13-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
benzyl alcohol 100-51-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,4,6- tris(dimethylaminomethyl)phenol 90-72-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,4,6- tris(dimethylaminomethyl)phenol 90-72-2	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
2,4,6- tris(dimethylaminomethyl)phenol 90-72-2	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
benzyl alcohol 100-51-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

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
benzyl alcohol 100-51-6	not carcinogenic	oral: gavage	104 weeks once daily, 5 days/week	rat	male/female	equivalent or similar OECD Guideline 451 (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		
benzyl alcohol	NOAEL P 200 mg/kg	screening	oral: gavage	mouse	not specified
100-51-6					

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		
Isophorone diamine	NOAEL < 60 mg/kg	oral:	13 weeks	rat	OECD Guideline 408
2855-13-2		drinking			(Repeated Dose 90-Day
		water			Oral Toxicity in Rodents)
benzyl alcohol	NOAEL 400 mg/kg	oral: gavage	13 weeks	rat	equivalent or similar to
100-51-6			once daily, 5		OECD Guideline 408
			days/week		(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				
Isophorone diamine	LC50	110 mg/l	96 h	Leuciscus idus	EU Method C.1 (Acute
2855-13-2					Toxicity for Fish)
C18 Fatty acid dimer, tall oil	LC50	7,07 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
fatty acid, triethylenetetramine					Acute Toxicity Test)
polymer					
68082-29-1					
benzyl alcohol	LC50	460 mg/l	96 h	Pimephales promelas	EPA OPP 72-1 (Fish Acute
100-51-6					Toxicity Test)
N-(3-	LC50	168 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
(Trimethoxysilyl)propyl)ethyl					Acute Toxicity Test)
enediamine					
1760-24-3					
Formaldehyde, polymer with	LC50	96 mg/l	96 h	Poecilia reticulata	OECD Guideline 203 (Fish,
benzenamine, hydrogenated					Acute Toxicity Test)
135108-88-2					
Salicylic acid	LC50	1.370 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
69-72-7					Acute Toxicity Test)
N,N'-Ethane-1,2-diylbis(12-	LL50		96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
hydroxyoctadecan-1-amide)					Acute Toxicity Test)
123-26-2					
2,4,6-	LC50	153 mg/l	96 h	Brachydanio rerio (new name:	ISO 7346-1 (Determination
tris(dimethylaminomethyl)phe				Danio rerio)	of the Acute Lethal Toxicity
nol					of Substances to a
90-72-2					Freshwater Fish
					[Brachydanio rerio
					Hamilton-Buchanan
					(Teleostei, Cyprinidae)]

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				
Isophorone diamine 2855-13-2	EC50	42 mg/l	24 h	Daphnia magna	not specified
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	EC50	7,07 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
benzyl alcohol 100-51-6	EC50	230 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC50	87,4 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	EC50	15,4 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Salicylic acid 69-72-7	EC50	870 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	EL50		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				
Isophorone diamine	NOEC	3 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
2855-13-2					magna, Reproduction Test)
benzyl alcohol	NOEC	51 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
100-51-6					magna, Reproduction Test)
N-(3-	NOEC	> 1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
(Trimethoxysilyl)propyl)ethyl					magna, Reproduction Test)
enediamine					
1760-24-3					
Salicylic acid	NOEC	10 mg/l	21 d	Daphnia magna	OECD Guideline 202
69-72-7					(Daphnia sp. Chronic
					Immobilisation 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				
Isophorone diamine 2855-13-2	NOEC	1,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Isophorone diamine 2855-13-2	EC50	37 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	EC50	4,34 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	NOEC	0,5 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
benzyl alcohol 100-51-6	EC50	770 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
benzyl alcohol 100-51-6	NOEC	310 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC50	8,8 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	NOEC	3,1 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	EC10	1,2 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	EC50	43,94 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
Salicylic acid 69-72-7	EC50	> 100 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	EC50		72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	NOEC		72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	EC50	84 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	NOEC	6,25 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Isophorone diamine 2855-13-2	EC10	1.120 mg/l	18 h		not specified
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	EC10	130 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
benzyl alcohol 100-51-6	EC10	658 mg/l	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC 50	435 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Salicylic acid	EC50	> 1.000 mg/l	3 h	not specified	OECD Guideline 209

69-72-7					(Activated Sludge,
					Respiration Inhibition Test)
2,4,6-	EC0	27 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8
tris(dimethylaminomethyl)phe					(Pseudomonas
nol					Zellvermehrungshemm-
90-72-2					Test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Isophorone diamine 2855-13-2		aerobic	8 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	not readily biodegradable.	no data	0 - 60 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
benzyl alcohol 100-51-6	readily biodegradable	aerobic	92 - 96 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (1))
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3		aerobic	50 %		OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Salicylic acid 69-72-7	readily biodegradable	aerobic	88,1 %	15 d	EU Method C.4-F (Determination of the "Ready" BiodegradabilityMITI Test)
Salicylic acid 69-72-7	inherently biodegradable	aerobic	100 %	4 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2	not readily biodegradable.	aerobic	22 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	not readily biodegradable.	aerobic	4 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	18 - 219	56 d		Cyprinus carpio	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	10,34		QSAR (Quantitative Structure Activity Relationship)
benzyl alcohol 100-51-6	1,05	20 °C	EU Method A.8 (Partition Coefficient)
N-(3- (Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	-1,67		not specified
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	2,68	21 °C	EU Method A.8 (Partition Coefficient)
Salicylic acid 69-72-7	2,26	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	5,86		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	-0,66	21,5 °C	EPA OPPTS 830.7550 (Partition Coefficient, n-octanol / H2O, Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Isophorone diamine 2855-13-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
benzyl alcohol 100-51-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Formaldehyde, polymer with benzenamine, hydrogenated 135108-88-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Salicylic acid 69-72-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

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	1759
RID	1759
ADN	1759
IMDG	1759
IATA	1759

14.2. UN proper shipping name

ADR	CORROSIVE SOLID, N.O.S. (Isophoronediamine)
RID	CORROSIVE SOLID, N.O.S. (Isophoronediamine)
ADN	CORROSIVE SOLID, N.O.S. (Isophoronediamine)
IMDG	CORROSIVE SOLID, N.O.S. (Isophoronediamine)
IATA	Corrosive solid, n.o.s. (Isophoronediamine)

14.3. Transport hazard class(es)

ADR	8
RID	8
ADN	8
IMDG	8
IATA	8

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	Ш

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
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

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

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

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

- H302 Harmful if swallowed.
- 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.
- H332 Harmful if inhaled.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- H413 May cause long lasting harmful effects to aquatic life.

Further information:

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