



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

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LOCTITE EA 9492 A known as 9492 A 20KG DE FR GB NL

SDS No. : 204340
V006.1

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

1.1. Product identifier

LOCTITE EA 9492 A known as 9492 A 20KG DE FR GB NL

Contains:

Bisphenol-F epichlorhydrin resin; MW<700
Epoxy resin (number average molecular weight \leq 700)

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

Intended use:
2-Component 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:**Signal word:**

Warning

Hazard statement:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statement:
Prevention**

P273 Avoid release to the environment.
P280 Wear protective gloves.

**Precautionary statement:
Response**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Declaration of the ingredients according to CLP (EC) No 1272/2008:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	500-006-8 500-006-8 01-2119454392-40	25- 50 %	Skin Irrit. 2; Dermal H315 Skin Sens. 1A H317 Aquatic Chronic 2 H411
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	10- 20 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411

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

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.
Seek medical advice.

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: Redness, inflammation.

SKIN: Rash, Urticaria.

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 (NO_x) 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.

Ensure adequate ventilation.

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)

2-Component epoxy adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		1	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		0,8	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (freshwater)		0,003 mg/l				
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (marine water)		0,0003 mg/l				
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	sewage treatment plant (STP)		10 mg/l				
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	sediment (freshwater)				0,294 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	sediment (marine water)				0,0294 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	soil				0,237 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (intermittent releases)		0,0254 mg/l				
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)		0,006 mg/l				
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)		0,001 mg/l				
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sewage treatment plant (STP)		10 mg/l				
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)				0,996 mg/kg		
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)				0,1 mg/kg		
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil				0,196 mg/kg		
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral				11 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	Workers	dermal	Acute/short term exposure - local effects		0,0083 mg/cm2	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	Workers	dermal	Long term exposure - systemic effects		104,15 mg/kg	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	Workers	Inhalation	Long term exposure - systemic effects		29,39 mg/m3	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	General population	dermal	Long term exposure - systemic effects		62,5 mg/kg	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	General population	Inhalation	Long term exposure - systemic effects		8,7 mg/m3	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	General population	oral	Long term exposure - systemic effects		6,25 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	dermal	Acute/short term exposure - systemic effects		8,33 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	dermal	Long term exposure - systemic effects		8,33 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	General population	dermal	Acute/short term exposure - systemic effects		3,571 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	General population	dermal	Long term exposure - systemic effects		3,571 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	General population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	General population	oral	Long term exposure - systemic effects		0,75 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	General population	inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 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:
Protective 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	paste paste grey, opaque
Odor	odourless
Odour threshold	No data available / Not applicable
pH	Not applicable
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	> 260,0 °C (> 500 °F)
Flash point	> 248,0 °C (> 478.4 °F)
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure (50 °C (122 °F))	< 0,0300000 mbar
Relative vapour density:	No data available / Not applicable
Density	1,5200 - 1,5600 g/cm ³

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Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Insoluble
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
Viscosity (Cone and plate; 25 °C (77 °F))	10.000 - 20.000 mPa.s
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.
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

No decomposition if used according to specifications.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Inhalative toxicity:

May cause irritation to respiratory system.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 420 (Acute Oral Toxicity)

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LD50	> 2.000 mg/kg	dermal		rat	not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
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)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
	negative	oral: gavage		rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)
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)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	negative	oral: gavage		mouse	not specified

Carcinogenicity:

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

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
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	238 d	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOAEL=250 mg/kg	oral: gavage	13 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	NOAEL=50 mg/kg	oral: gavage	14 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Toxic to aquatic life with long lasting effects.

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	1,6 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	1,8 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LC50	1,75 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	EC50	1,7 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	EC50	> 11 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	4,2 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	IC50	> 100 mg/l	Bacteria	3 h	activated sludge, industrial	other guideline:
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5		aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6		aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available for the product.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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 components CAS-No.	PBT/vPvB

Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	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.

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

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 resin,Bisphenol-A Epichlorhydrin resin)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADN	9
IMDG	9
IATA	9

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. 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 %
(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 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 Regulation (EC) No 1907/2006

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LOCTITE EA 9492 B known as 9492 B 20KG DE FR GB NL

SDS No. : 204341
V006.0

Revision: 03.01.2017
printing date: 07.03.2018

Replaces version from: 29.11.2016

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

1.1. Product identifier

LOCTITE EA 9492 B known as 9492 B 20KG DE FR GB NL

Contains:

4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine
Diethylenetriamine
m-Phenylenebis(methylamine)
4,4'-Isopropylidenediphenol
N-(3-(Trimethoxysilyl)propyl)ethylenediamine

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@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 3
H331 Toxic if inhaled. Route of Exposure: Inhalation	
Skin corrosion	Category 1B
H314 Causes severe skin burns and eye damage.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Toxic to reproduction	Category 2
H361f Suspected of damaging fertility. Chronic hazards to the aquatic environment	
H411 Toxic to aquatic life with long lasting effects.	Category 2

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H331 Toxic if inhaled. H361f Suspected of damaging fertility. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement: Prevention	P261 Avoid breathing vapours. P273 Avoid release to the environment. 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/ shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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

General chemical description:

Part B of a two part adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine 31326-29-1	500-072-8	20- 40 %	Acute Tox. 4 H302 Acute Tox. 4 H312 Skin Corr. 1B H314 Skin Sens. 1 H317
Diethylenetriamine 111-40-0	203-865-4 01-2119473793-27 01-2119969287-21	5- < 10 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Corr. 1B H314 Skin Sens. 1 H317 Acute Tox. 2; Inhalation H330 STOT SE 3 H335
m-Phenylenebis(methylamine) 1477-55-0	216-032-5 01-2119480150-50	5- < 10 %	Acute Tox. 4; Oral H302 Skin Corr. 1B H314 Skin Sens. 1; Dermal H317 Acute Tox. 4; Inhalation H332 Aquatic Chronic 3 H412
4,4'-Isopropylidenediphenol 80-05-7	201-245-8 01-2119457856-23 01-2119529244-43	3- < 5 %	Repr. 2 H361f STOT SE 3 H335 Eye Dam. 1 H318 Skin Sens. 1 H317 Aquatic Chronic 2 H411
Benzyl alcohol 100-51-6	202-859-9 01-2119492630-38	1- < 3 %	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	0,1- < 1 %	Skin Sens. 1; Dermal H317 Eye Dam. 1 H318 Acute Tox. 4; Inhalation H332
Nonylphenol 25154-52-3	246-672-0	0,3- < 1 %	Repr. 2 H361fd Acute Tox. 4; Oral H302 Skin Corr. 1B H314 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 ===== EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC) M factor (Acute Aquat Tox): 10 M factor (Chron Aquat Tox): 10

For full text of the H - statements and other abbreviations see section 16 "Other information".

Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

Causes burns.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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

None

carbon oxides.

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 let product enter drains.

6.3. Methods and material for containment and cleaning up

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.

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.

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

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		1	Time Weighted Average (TWA):		EH40 WEL
2,2'-Iminodi(ethylamine) 111-40-0 [2,2'-IMINODI(ETHYLAMINE)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
2,2'-Iminodi(ethylamine) 111-40-0 [2,2'-IMINODI(ETHYLAMINE)]	1	4,3	Time Weighted Average (TWA):		EH40 WEL
4,4'-Isopropylidenediphenol 80-05-7 [BISPHENOL A, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
4,4'-Isopropylidenediphenol 80-05-7 [BISPHENOL A (INHALABLE DUST)]		10	Time Weighted Average (TWA):	Indicative	ECLTV

Occupational Exposure LimitsValid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		0,8	Time Weighted Average (TWA):		IR_OEL
2,2'-Iminodi(ethylamine) 111-40-0 [DIETHYLENE TRIAMINE]	1	4	Time Weighted Average (TWA):		IR_OEL
2,2'-Iminodi(ethylamine) 111-40-0 [DIETHYLENE TRIAMINE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
4,4'-Isopropylidenediphenol 80-05-7 [BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) (INHALABLE DUST)]		10	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
4,4'-Isopropylidenediphenol 80-05-7 [BISPHENOL A (INHALABLE DUST)]		10	Time Weighted Average (TWA):	Indicative	ECLTV

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (freshwater)					0,56 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (marine water)					0,056 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (intermittent releases)					0,32 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	sediment (freshwater)				1072 mg/kg		
2,2'-Iminodi(ethylamine) 111-40-0	sediment (marine water)				107,2 mg/kg		
2,2'-Iminodi(ethylamine) 111-40-0	sewage treatment plant (STP)					6 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	soil				7,97 mg/kg		
2,2'-Iminodi(ethylamine) 111-40-0	Air						
m-Phenylenebis(methylamine) 1477-55-0	aqua (freshwater)					0,094 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	aqua (marine water)					0,0094 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	aqua (intermittent releases)					0,152 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	sewage treatment plant (STP)					10 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	sediment (freshwater)				0,43 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	sediment (marine water)				0,043 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	soil				0,045 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	aqua (freshwater)					0,018 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	aqua (marine water)					0,016 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	aqua (intermittent releases)					0,01 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	sewage treatment plant (STP)					320 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	sediment (freshwater)				2,2 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	sediment (marine water)				0,44 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	soil				3,7 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	oral					13,8 mg/kg food	
Benzyl alcohol 100-51-6	soil				0,456 mg/kg		
Benzyl alcohol 100-51-6	sewage treatment plant (STP)					39 mg/L	
Benzyl alcohol 100-51-6	sediment (freshwater)				5,27 mg/kg		
Benzyl alcohol 100-51-6	sediment (marine water)				0,527 mg/kg		
Benzyl alcohol 100-51-6	aqua (marine water)					0,1 mg/L	
Benzyl alcohol 100-51-6	aqua (intermittent releases)					2,3 mg/L	
Benzyl alcohol 100-51-6	aqua (freshwater)					1 mg/L	
N-(3-	aqua					0,062 mg/L	

(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	(freshwater)						
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	aqua (marine water)					0,0062 mg/L	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	aqua (intermittent releases)					0,62 mg/L	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	sediment (freshwater)				0,22 mg/kg		
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	sediment (marine water)				0,022 mg/kg		
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	soil				0,0085 mg/kg		
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	sewage treatment plant (STP)					25 mg/L	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-Iminodi(ethylamine) 111-40-0	Workers	dermal	Long term exposure - systemic effects		11,4 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	Workers	dermal	Long term exposure - local effects		1,1 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	Workers	Inhalation	Acute/short term exposure - systemic effects		92,1 mg/m ³	
2,2'-Iminodi(ethylamine) 111-40-0	Workers	Inhalation	Acute/short term exposure - local effects		2,6 mg/m ³	
2,2'-Iminodi(ethylamine) 111-40-0	Workers	Inhalation	Long term exposure - systemic effects		15,4 mg/m ³	
2,2'-Iminodi(ethylamine) 111-40-0	Workers	Inhalation	Long term exposure - local effects		0,87 mg/m ³	
2,2'-Iminodi(ethylamine) 111-40-0	General population	dermal	Acute/short term exposure - local effects		4,88 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	General population	Inhalation	Acute/short term exposure - systemic effects		27,5 mg/m ³	
2,2'-Iminodi(ethylamine) 111-40-0	General population	dermal	Long term exposure - systemic effects		4,88 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	General population	Inhalation	Long term exposure - systemic effects		4,6 mg/m ³	
m-Phenylenebis(methylamine) 1477-55-0	Workers	dermal	Long term exposure - systemic effects		0,33 mg/kg	
m-Phenylenebis(methylamine) 1477-55-0	Workers	inhalation	Long term exposure - systemic effects		1,2 mg/m ³	
m-Phenylenebis(methylamine) 1477-55-0	Workers	inhalation	Long term exposure - local effects		0,2 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	Workers	dermal	Acute/short term exposure - systemic effects		1,4 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	Workers	Inhalation	Acute/short term exposure - local effects		10 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	Workers	dermal	Long term exposure - systemic effects		1,4 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	Workers	Inhalation	Long term exposure - local effects		10 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	Workers	Inhalation	Acute/short term exposure - systemic effects		10 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	Workers	Inhalation	Long term exposure - systemic effects		10 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	General population	dermal	Acute/short term exposure - systemic effects		0,7 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	General population	Inhalation	Acute/short term exposure - systemic effects		5,0 mg/m ³	
4,4'-Isopropylidenediphenol 80-05-7	General population	oral	Acute/short term exposure - systemic effects		0,05 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	General population	dermal	Long term exposure - systemic effects		0,7 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	General population	Inhalation	Long term exposure -		0,25 mg/m ³	

			systemic effects		
4,4'-Isopropylidenediphenol 80-05-7	General population	oral	Long term exposure - systemic effects		0,05 mg/kg bw/day
4,4'-Isopropylidenediphenol 80-05-7	General population	Inhalation	Long term exposure - local effects		5 mg/m3
4,4'-Isopropylidenediphenol 80-05-7	General population	Inhalation	Acute/short term exposure - local effects		5 mg/m3
Benzyl alcohol 100-51-6	General population	oral	Acute/short term exposure - systemic effects		20 mg/kg bw/day
Benzyl alcohol 100-51-6	General population	oral	Long term exposure - systemic effects		4 mg/kg bw/day
Benzyl alcohol 100-51-6	Workers	inhalation	Acute/short term exposure - systemic effects		110 mg/m3
Benzyl alcohol 100-51-6	Workers	inhalation	Long term exposure - systemic effects		22 mg/m3
Benzyl alcohol 100-51-6	General population	inhalation	Acute/short term exposure - systemic effects		27 mg/m3
Benzyl alcohol 100-51-6	General population	inhalation	Long term exposure - systemic effects		5,4 mg/m3
Benzyl alcohol 100-51-6	Workers	dermal	Acute/short term exposure - systemic effects		40 mg/kg bw/day
Benzyl alcohol 100-51-6	Workers	dermal	Long term exposure - systemic effects		8 mg/kg bw/day
Benzyl alcohol 100-51-6	General population	dermal	Acute/short term exposure - systemic effects		20 mg/kg bw/day
Benzyl alcohol 100-51-6	General population	dermal	Long term exposure - systemic effects		4 mg/kg bw/day
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 bw/day
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Workers	dermal	Acute/short term exposure - systemic effects		5 mg/kg bw/day
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 bw/day
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	General population	oral	Long term exposure - systemic effects		2,5 mg/kg bw/day
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	General population	dermal	Acute/short term exposure - systemic effects		17 mg/kg bw/day

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	liquid liquid grey, opaque
Odor	characteristic, of amine
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 200,0 °C (> 392 °F)
Flash point	> 100,0 °C (> 212 °F); no method
Decomposition temperature	No data available / Not applicable
Vapour pressure (50 °C (122 °F))	< 1,3300000 mbar
Density (ρ)	1,5000 - 1,5800 g/cm ³
Bulk density	No data available / Not applicable
Viscosity (Cone and plate; 25 °C (77 °F); Shear gradient: 40 s ⁻¹)	20 - 45 mPa.s
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Partially soluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable

Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with 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

Stable under normal conditions of storage and use.

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

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Inhalative toxicity:

Toxic if inhaled.

Skin irritation:

Causes severe skin burns and eye damage.

Eye irritation:

Avoid eye contact.

Corrosive

Sensitizing:

May cause an allergic skin reaction.

Reproductive toxicity:

Suspected of damaging fertility.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine 31326-29-1	LD50	1.140 mg/kg	oral		rat	not specified
Diethylenetriamine 111-40-0	LD50	1.553 mg/kg	oral		rat	not specified
m-Phenylenebis(methylamine) 1477-55-0	LD50	980 mg/kg	oral		rat	not specified
4,4'-Isopropylidenediphenol 80-05-7	LD50	> 2.000 - < 5.000 mg/kg	oral			
4,4'-Isopropylidenediphenol 80-05-7	Acute toxicity estimate (ATE)	2.500 mg/kg				Expert judgement
Benzyl alcohol 100-51-6	LD50	1.620 mg/kg	oral		rat	not specified
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LD50	2.295 mg/kg	oral		rat	EPA OPPTS 870.1100 (Acute Oral Toxicity)
Nonylphenol 25154-52-3	LD50	1.900 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Diethylenetriamine 111-40-0	NOEL	0,07 mg/l			rat	OECD Guideline 403 (Acute Inhalation Toxicity)
m-Phenylenebis(methylamine) 1477-55-0	LC50	1,16 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Benzyl alcohol 100-51-6	Acute toxicity estimate (ATE)	4,17 mg/l	aerosol			Expert judgement
Benzyl alcohol 100-51-6	LC50	> 4,178 mg/l		4 h	rat	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LC50	1,49 - 2,44 mg/l	aerosol	4 h	rat	EPA OPPTS 870.1300 (Acute inhalation toxicity)

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Diethylenetriamine 111-40-0	LD50	1.045 mg/kg	dermal		rabbit	not specified
m-Phenylenebis(methylamine) 1477-55-0	LD50	> 3.100 mg/kg	dermal		rat	
4,4'-Isopropylidenediphenol 80-05-7	LD50	3.600 mg/kg	dermal		rabbit	not specified
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LD50	> 2.000 mg/kg	dermal		rat	EPA OPPTS 870.1200 (Acute Dermal Toxicity)
Nonylphenol 25154-52-3	LD50	> 2.000 mg/kg	dermal		rabbit	not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethylenetriamine 111-40-0	corrosive	15 min	rabbit	BASF Test
Benzyl alcohol 100-51-6	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Nonylphenol 25154-52-3	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethylenetriamine 111-40-0	corrosive	30 s	rabbit	not specified
Benzyl alcohol 100-51-6	Category II	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Nonylphenol 25154-52-3	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Diethylenetriamine 111-40-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
m- Phenylenebis(methylamine) 1477-55-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Benzyl alcohol 100-51-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
N-(3- (Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	sensitising	Mouse local lymphnode assay (LLNA)	guinea pig	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Nonylphenol 25154-52-3	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Nonylphenol 25154-52-3	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Diethylenetriamine 111-40-0	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	in vitro mammalian chromosome aberration test	with and without		Chromosome Aberration Test
Diethylenetriamine 111-40-0	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
	negative	oral: gavage		mouse	not specified
m- Phenylenebis(methylamin e) 1477-55-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
	negative	in vitro mammalian chromosome aberration test	with and without		not specified
4,4'- Isopropylidenediphenol 80-05-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
Benzyl alcohol 100-51-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Benzyl alcohol 100-51-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
	negative			Drosophila melanogaster	OECD Guideline 477 (Genetic Toxicology: Sex-linked Recessive Lethal Test in Drosophila melanogaster)
Nonylphenol 25154-52-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		Ames Test

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure time Frequency of treatment	Route of application	Method
Diethylenetriamine 111-40-0	not carcinogenic	mouse	male	lifetime (appr. 587 d) 3 d/w	dermal	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Diethylenetriamine 111-40-0	NOAEL P = 100 mg/kg NOAEL F1 = 30 mg/kg	screening oral: gavage	29-54 d	rat	OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Diethylenetriamine 111-40-0	NOAEL=70 -- 80 mg/kg	oral: feed	90 ddaily	rat	not specified
Diethylenetriamine 111-40-0	NOAEL=0,55 mg/l	inhalation: vapour	15 d6 h/d	rat	not specified
m- Phenylenebis(methylamin e) 1477-55-0	LOAEL=>= 600 mg/kg	oral: gavage	28 daysdaily	rat	Guidelines for 28-Day Repeat Dose Toxicity Test (Japan)
Nonylphenol 25154-52-3	NOAEL=100 mg/kg	oral: feed	28 daysdaily	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Ecotoxicity:

Do not empty into drains / surface water / ground water.
Toxic to aquatic life with long lasting effects.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Diethylenetriamine 111-40-0	LC50	430 mg/l	Fish	96 h	Poecilia reticulata	EU Method C.1 (Acute Toxicity for Fish)
	NOEC	> 10 mg/l	Fish	28 d	Gasterosteus aculeatus	OECD Guideline 210 (fish early lite stage toxicity test)
Diethylenetriamine 111-40-0	EC50	64,6 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
Diethylenetriamine 111-40-0	EC50	1.164 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	10 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diethylenetriamine 111-40-0	NOEC	6 mg/l	Bacteria	3 h	anaerobic bacteria	not specified
Diethylenetriamine 111-40-0	NOEC	5,6 mg/l	chronic Daphnia	21 d	Daphnia magna	EU Method C.20 (Daphnia magna Reproduction Test)
m-Phenylenebis(methylamine) 1477-55-0	LC50	> 100 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
m-Phenylenebis(methylamine) 1477-55-0	EC50	16 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
m-Phenylenebis(methylamine) 1477-55-0	EC50	33,3 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	22,9 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
m-Phenylenebis(methylamine) 1477-55-0	NOEC	4,7 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
4,4'-Isopropylidenediphenol 80-05-7	LC50	9,9 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
	NOEC	16 µg/l	Fish	444 d	Pimephales promelas	EPA OPP 72-5 (Fish Life Cycle Toxicity)
4,4'-Isopropylidenediphenol 80-05-7	EC50	3,9 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'-Isopropylidenediphenol 80-05-7	EC50	2,5 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'-Isopropylidenediphenol 80-05-7	EC10	> 320 mg/l	Bacteria	18 h		not specified
4,4'-Isopropylidenediphenol 80-05-7	NOEC	> 3,146 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Benzyl alcohol 100-51-6	LC50	646 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Benzyl alcohol 100-51-6	EC50	360 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzyl alcohol 100-51-6	EC50	770 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	310 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Benzyl alcohol 100-51-6	EC10	658 mg/l	Bacteria	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe mm-Test)
Benzyl alcohol 100-51-6	NOEC	51 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna,

N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	LC50	168 mg/l	Fish	96 h	Pimephales promelas	Reproduction Test) OECD Guideline 203 (Fish, Acute Toxicity Test)
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC50	87,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC50	8,8 mg/l	Algae	96 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	NOEC	3,1 mg/l	Algae	96 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	EC 50	435 mg/l	Bacteria	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	NOEC	> 1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Nonylphenol 25154-52-3	LC50	0,23 mg/l	Fish	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
Nonylphenol 25154-52-3	NOEC	0,006 mg/l	Fish	91 d	not specified	OECD Guideline 210 (fish early lite stage toxicity test)
Nonylphenol 25154-52-3	EC50	0,085 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Nonylphenol 25154-52-3	EC50	0,41 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
Nonylphenol 25154-52-3	EC10	950 mg/l	Bacteria	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Nonylphenol 25154-52-3	NOEC	0,024 mg/l	chronic Daphnia	21 day	Daphnia magna	OECD Guideline 202 (Daphnia sp. Chronic Immobilisation Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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Diethylenetriamine 111-40-0	inherently biodegradable	aerobic	83 %	EU Method C.9 (Biodegradation: Zahn-Wellens Test)
	readily biodegradable	aerobic	87 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
4,4'-Isopropylidenediphenol 80-05-7	readily biodegradable	aerobic	89 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Benzyl alcohol 100-51-6	readily biodegradable	aerobic	92 - 96 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3		aerobic	50 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Nonylphenol 25154-52-3	Not readily biodegradable.	aerobic	48,2 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Diethylenetriamine 111-40-0		> 0,3 - < 6,3	42 d	Cyprinus carpio		OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)
Diethylenetriamine 111-40-0	-1,58				20 °C	QSAR (Quantitative Structure Activity Relationship)
4,4'-Isopropylidenediphenol 80-05-7		5,1 - 13,8	42 d	Cyprinus carpio	25 °C	not specified
4,4'-Isopropylidenediphenol 80-05-7	3,4				21,5 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
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
Nonylphenol 25154-52-3		740		Pimephales promelas		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Nonylphenol 25154-52-3	5,4				23 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB

Diethylenetriamine 111-40-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
m-Phenylenebis(methylamine) 1477-55-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4,4'-Isopropylidenediphenol 80-05-7	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.
Nonylphenol 25154-52-3	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

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. (m-Xylylenediamine,Diethylenetriamine)
RID	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
ADN	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine,Nonylphenol)
IATA	Amines, liquid, corrosive, n.o.s. (m-Xylylenediamine,Diethylenetriamine)

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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**VOC content < 10,00 %
(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:

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361f Suspected of damaging fertility.
- H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further information:

This 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.