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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFLOOR I 320 SL CONCEPT comp.A

Trade code: 903F9990

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

Recommended use: Epoxy paint

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731

Fax: +39-02-37673.214

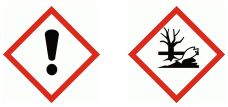
Responsable: sicurezza@mapei.it

1.4. Emergency telephone number

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1A	May cause an allergic skin reaction.
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words

Warning

Hazard statements:

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 statements:

P261	Avoid breathing mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

Special Provisions:

EUH208	Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700). May produce an allergic reaction.

EUH208 Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs.. May produce an allergic reaction.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains:

bisphenol F - epoxy resin

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: MAPEFLOOR I 320 SL CONCEPT comp.A

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8	Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1,1A,1B, H317; Aquatic Chronic 2, H411	01-2119456619-26-xxxx
≥5 - <10 %	bisphenol F - epoxy resin	CAS:9003-36-5 EC:500-006-8	Skin Irrit. 2, H315; Skin Sens. 1A, H317; Aquatic Chronic 2, H411	01-2119454392-40-XXXX
≥2.5 - <5 %	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1, H317	01-2119485289-22-XXXX
≥1 - <2.5 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2, H319	01-2119492630-38-XXXX
≥0.05 - <0.1 %	o-xylene	CAS:1330-20-7 EC:215-535-7	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H332; Acute Tox. 4, H312; Eye Irrit. 2, H319; Skin Irrit. 2, H315; STOT SE 3, H335; STOT RE 2, H373	01-2119488216-32-XXXX
≥0.016 - <0.025 %	ethylbenzene	CAS:100-41-4 EC:202-849-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	National	BULGARIA		1,0					
benzyl alcohol	National	FINLAND		45	10				
	National	POLAND		240					
	DFG	GERMANY	C			44	10		
	National	GERMANY		22	5				
	NDS	POLAND		240					
	National	CZECH REPUBLIC		40					
	National	LATVIA		5					
	National	CZECH REPUBLIC	C			80			
	National	BULGARIA		5,0					
	National	LITHUANIA		5					
o-xylene	National	SWEDEN		221	50	442	100		SWEDEN, Short term value, 15 minutes average value
	National	FINLAND		220	50	440	100		FINLAND, hud
	National	NORWAY		108	25				NORWAY, H
	EU	None		221	50	442	100		Skin
	National	NORWAY		109	25	218	50		
	ACGIH	None			100		150		A4, BEI - URT and eye irr, CNS impair
	National	POLAND		100					
	DFG	GERMANY	C			880	200		
	ACGIH				100		150		A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation
	National	SWEDEN		221	50				
	National	FRANCE		221	50	442	100		
	National	SPAIN		221	50	442	100		
	National	GREECE		435	100	650	150		
	National	DENMARK		109	25				
	National	FINLAND		220	50	440	100		
	National	GERMANY		440	100				
	National	PORTUGAL		221	50	442	100		
	National	NORWAY		108	25	135	37,5		
	National	BELGIUM		221	50	442	100		
	NDS	POLAND		100					
	NDSCh	POLAND				200			
	CHE	SWITZERLAND				870	200		
	NDS	NETHERLANDS		210		442			
	National	CZECH REPUBLIC		200					
	National	HUNGARY		221		442			
	Malaysia OEL	MALAYSIA		434	100				
	National	ESTONIA		200	50	450	100		
	National	LATVIA		221	50	442	100		

	National	CZECH REPUBLIC	C			400			
	National	SLOVAKIA	C			442			
	National	SLOVAKIA		221	50				
	National	SLOVENIA		221	50	442	100		
	National	UNITED KINGDOM		220	50	441	100		
	National	BULGARIA		221,0	50	442	100		
	National	ROMANIA		221	50	442	100		
	TUR	TURKEY		221	50	442	100		
	National	LITHUANIA		221	50	442	100		
	National	CROATIA		221	50	442	100		
	EU			221	50	442	100	Indicative	Possibility of significant uptake through the skin (pure)
ethylbenzene	National	SWEDEN		200	50	450	100		SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		220	50	880	200		FINLAND, hud
	National	NORWAY		20	5				NORWAY, HK
	EU	None		442	100	884	200		Skin
	National	NORWAY		217	50	434	100		
	ACGIH	None			20				A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair
	National	POLAND		200		400			
	DFG	GERMANY	C			176	40		
	ACGIH				20				A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;upper respiratory tract irritation;kidney damage (nephropathy);cochlear impairment
	National	SWEDEN		220	50				
	National	FRANCE		88,4	20	442	100		
	National	SPAIN		441	100	884	200		
	National	GREECE		435	100	545	125		
	National	DENMARK		217	50				
	National	FINLAND		220	50	880	200		
	National	GERMANY		88	20				
	National	PORTUGAL		442	100	884	200		
	National	NORWAY		20	5	30	10		
	National	BELGIUM		442	100	551	125		
	NDS	POLAND		200					
	NDSCh	POLAND				400			
	CHE	SWITZERLAND				220	50		
	NDS	NETHERLANDS		215		430			
	National	CZECH REPUBLIC		200					
	National	HUNGARY		442		884			
	Malaysia OEL	MALAYSIA		434	100				
	National	ESTONIA		442	100	884	200		
	National	LATVIA		442	100	884	200		
	National	CZECH REPUBLIC	C			500			

National	SLOVAKIA	C			884			
National	SLOVAKIA		442	100				
National	SLOVENIA		442	100	884	200		
National	UNITED KINGDOM		441	100	552	125		
National	BULGARIA		435		545			
National	ROMANIA		442	100	884	200		
TUR	TURKEY		442	100	884	200		
National	LITHUANIA		442	100	884	200		
National	CROATIA		442	100	884	200		
EU			442	100	884	200	Indicative	Possibility of significant uptake through the skin

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
100-41-4	ethylbenzene	0,15	GGCREAT	Urine	Mandelic acid and fenilgliossalico	End of turn

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	0,006 mg/l	Fresh Water		
		0,0006 mg/l	Marine water		
		0,0627 mg/kg	Freshwater sediments		
		0,00627 mg/kg	Marine water sediments		
bisphenol F - epoxy resin	9003-36-5	10 mg/l	Microorganisms in sewage treatments		
		0,003 mg/l	Fresh Water		
		0,294 mg/kg	Freshwater sediments		
		0,0003 mg/l	Marine water		
		0,0294 mg/kg	Marine water sediments		
		0,237 mg/kg	Soil		
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2	0,00072 mg/l	Marine water		
		0,0072 mg/l	Fresh Water		
		66,77 mg/kg	Freshwater sediments		
		6,677 mg/kg	Marine water sediments		
		80,12 mg/kg	Soil		
		10 mg/l	Microorganisms in sewage treatments		

benzyl alcohol	100-51-6	1 mg/l	Fresh Water
		0,1 mg/l	Marine water
		5,27 mg/kg	Freshwater sediments
		0,527 mg/kg	Marine water sediments
		39 mg/l	Microorganisms in sewage treatments
		0,45 mg/kg	Soil
		2,3 mg/l	Intermittent release
o-xylene	1330-20-7	0,327 mg/l	Fresh Water
		0,327 mg/l	Marine water
		12,46 mg/kg	Freshwater sediments
		12,46 mg/kg	Marine water sediments
		2,31 mg/kg	Soil
		6,58 mg/l	Microorganisms in sewage treatments
		0,327 mg/l	Intermittent release
ethylbenzene	100-41-4	0,1 mg/l	Fresh Water
		0,01 mg/l	Marine water
		13,7 mg/kg	Freshwater sediments
		1,37 mg/kg	Marine water sediments
		2,68 mg/kg	Soil
		9,6 mg/l	Microorganisms in sewage treatments

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	8,3 mg/kg			Human Dermal	Short Term, systemic effects	
		12,25 mg/m3			Human Inhalation	Short Term, systemic effects	
		8,3 mg/kg			Human Dermal	Long Term, systemic effects	
		12,25 mg/m3			Human Inhalation	Long Term, systemic effects	
				3,571 mg/kg	Human Dermal	Short Term, systemic effects	
				0,75 mg/kg	Human Oral	Short Term, systemic effects	
				3,571 mg/kg	Human Dermal	Long Term, systemic effects	
				0,75 mg/kg	Human Oral	Long Term, systemic effects	
benzyl alcohol	100-51-6			20 mg/kg	Human Oral	Short Term, systemic effects	

			4 mg/kg	Human Oral	Long Term, systemic effects
		110 mg/m3	27 mg/m3	Human Inhalation	Short Term, systemic effects
		22 mg/m3	5,4 mg/m3	Human Inhalation	Long Term, systemic effects
		40 mg/kg	20 mg/kg	Human Dermal	Short Term, systemic effects
		8 mg/kg	4 mg/kg	Human Dermal	Long Term, systemic effects
o-xylene	1330-20-7	289 mg/m3	174 mg/m3	Human Inhalation	Short Term, systemic effects
		289 mg/m3	174 mg/m3	Human Inhalation	Short Term, local effects
		180 mg/kg	108 mg/kg	Human Dermal	Long Term, systemic effects
		77 mg/m3	14,8 mg/m3	Human Inhalation	Long Term, systemic effects
			1,6 mg/kg	Human Oral	Long Term, systemic effects
ethylbenzene	100-41-4	180 mg/kg		Human Dermal	
		77 mg/m3	15 mg/m3	Human Inhalation	
			1,6 mg/kg	Human Oral	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste various

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.40 g/cm3
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): N.A. - This product is a mixture
Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature
Decomposition temperature: N.A.
Viscosity: 38,000.00 cPs
Explosive properties: N.A. - No components with explosive properties
Oxidizing properties: N.A. - No component with oxidizing properties
Solid/gas flammability: ==

9.2. Other information

No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Oral Rat > 15000 mg/kg
		LD50 Skin Rabbit > 23000 mg/kg
		LD50 Oral Rat = 11400 mg/kg
	i) STOT-repeated exposure	NOAEL Oral Rat = 50 mg/kg
		NOAEL Skin Rat = 100 mg/kg
bisphenol F - epoxy resin	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
		LD50 Oral Rat > 2 g/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rabbit > 3987 mg/kg
		LD50 Oral Rat = 17100 mg/kg

benzyl alcohol	a) acute toxicity	LD50 Skin Rabbit = 2000 mg/kg
		LD50 Oral Rat = 1620 mg/kg
		LC50 Inhalation Rat = 11,00000 mg/l 4h
		LD50 Skin Rabbit = 2 g/kg
		LC50 Inhalation Rat = 8,8 mg/l 4h
		LD50 Oral Rat = 1230 mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072 mg/m3
o-xylene	a) acute toxicity	LD50 Oral Rat = 3523 mg/kg
		LD50 Skin Rabbit > 4200 mg/kg
		LC50 Inhalation Vapour Rat > 20 mg/l 4h
		LD50 Skin Rabbit > 4350 mg/kg
		LC50 Inhalation Rat = 29,08 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg
ethylbenzene	a) acute toxicity	LD50 Oral Rat = 3500 mg/kg
		LD50 Skin Rabbit = 15400 mg/kg
		LC50 Inhalation Rat = 17,2 mg/l 4h
		LD50 Skin Rabbit = 15400 mg/kg
		LC50 Inhalation Rat = 17,4 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

Toxicological kinetics, metabolism and distribution information

i) STOT-repeated exposure

j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	CAS: 25068-38-6 - EINECS: 500-033-5 - INDEX: 603-074-00-8	a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1,8 mg/L 48
		a) Aquatic acute toxicity : LC50 Algae > 11 mg/L 72
		a) Aquatic acute toxicity : LC50 Daphnia = 1,3 mg/L 96
		b) Aquatic chronic toxicity : NOEC Daphnia = 0,3 mg/L
bisphenol F - epoxy resin	CAS: 9003-36-5 - EINECS: 500-006-8	a) Aquatic acute toxicity : EC50 Fish = 2,54 mg/L 96

		a) Aquatic acute toxicity : EC50 Daphnia = 2,55 mg/L 48
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : EC50 Daphnia = 7,20000 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 844,00000 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish > 1800,00000 mg/L 96
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1
		a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 66 mg/L
		b) Aquatic chronic toxicity : NOEC Daphnia = 51 mg/L - 21 d
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 10 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 23 mg/L 48h
o-xylene	CAS: 1330-20-7 - EINECS: 215-535-7	a) Aquatic acute toxicity : EC50 Algae = 2,2 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13,4 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2,661 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13,5 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13,1 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7,711 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,53 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30,26 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 3,82 mg/L 48h
		a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0,6 mg/L 48h
ethylbenzene	CAS: 100-41-4 - EINECS: 202-849-4	a) Aquatic acute toxicity : EC50 Algae = 7,7 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish = 5,1 mg/L 96
		a) Aquatic acute toxicity : LC50 Daphnia = mg/L 48
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 11 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4,2 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 7,55 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 32 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 9,1 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 9,6 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 1,8 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 4,6 mg/L 72h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 438 mg/L 96h IUCLID

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 2,6 mg/L 72h EPA

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 1,7 mg/L 96h EPA

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Product:

Do not dispose of waste into sewers.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to an authorized waste disposal service.

Contaminated packaging:

Empty remaining content.

Dispose of as unused product.

Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 9

ADR-Hazard identification number: NA

ADR-Special Provisions: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

Air (IATA) :

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisioning: A97 A158 A197

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274 335 969

IMDG-EMS: F-A, S-F

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

N.A.

These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids, or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to provisions of ADR, IMDG and IATA DGR.

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : 97,8 (A+B) g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) 2015/830

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Products belongs to category E2	200	500

German Water Hazard Class (WGK)

N.A.

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 70

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1-1A-1B	Skin Sens. 1,1A,1B	Skin Sensitisation, Category 1,1A,1B
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1A	Calculation method
4.1/C2	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 5. FIRE-FIGHTING MEASURES
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION