SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

NEXLER EPOLIS X9 składnik A

Creation date	15th February 2023		
Revision date	17th June 2024	Version	1.1

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

1.1. Product identifier NEXLER EPOLIS X9 składnik A

Substance / mixture: mixture

UFI: N3U1-H0PP-600F-QM3Q

Other mixture names

NEXLER EPOLIS X9 component A

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

Mixture's intended use

A two-component epoxy-bitumen coating that protects mineral and steel substrates against water, sewage and chemically aggressive substances.

Main intended use

PC-CON-5 Construction chemicals

Secondary uses

PC-PNT-3 Paints/coatings - Protective and functional

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	NEXLER sp. z o.o.
Address	Łużycka 6, Gdynia, 81-537 Poland
Identification number (CRN)	191528483
VAT Reg No	PL5862073821
Phone	+48 58 781 45 85
E-mail	info@nexler.com
Web address	www.nexler.com

Competent person responsible for the safety data sheet

Name	NEXLER sp. z o.o.
E-mail	info@nexler.com

1.4. Emergency telephone number

National Health Service (NHS) 111

National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Skin Sens. 1, H317
Eye Irrit. 2, H319
Repr. 2, H361d
STOT RE 2, H373
Aquatic Chronic 2, H411

Most serious adverse physico-chemical effects

Flammable liquid and vapour.

Most serious adverse effects on human health and the environment

Causes skin irritation. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging the unborn child. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Warning

Hazardous substances

bis[4-(2,3-epoxypropoxy)phenyl]propane
reaction mass of ethylbenzene and xylene
Solvent naphtha (coal), xylene-styrene cut
Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P391	Collect spillage.
P501	Dispose of contents/container to according to the instructions of the manufacturer or person authorized to dispose of waste.

Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-073-00-2 CAS: 1675-54-3 EC: 216-823-5 Registration number: 01-2119456619-26	bis[4-(2,3-epoxypropoxy)phenyl]propane	29-33	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific concentration limit: Skin Irrit. 2, H315; Eye Irrit. 2, H319: C ≥ 5 %	

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
EC: 905-588-0 Registration number: 01-2119488216-32	reaction mass of ethylbenzene and xylene	9,5-10,5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	2, 3
Index: 648-007-00-3 CAS: 85536-20-5 EC: 287-502-5 Registration number: 01-2119496055-34	Solvent naphtha (coal), xylene-styrene cut	6,5-7,5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d	1, 2, 3, 4, 5, 6
CAS: 68512-30-1 EC: 700-960-7 Registration number: 01-2119555274-38	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	5,2-6,2	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	5

Notes

1 Note J: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). This note applies only to certain complex coal- and oil-derived substances in Part 3.

2 A substance for which exposure limits are set.

3 Substance for which biological limit values exist.

4 The use of the substance is restricted by Annex XVII of REACH Regulation

5 Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.

6 Fulfilled Note J

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Rinse skin with water or shower.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

If inhaled

Not expected.

If on skin

May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Prevent contact with skin and eyes. No smoking. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Keep container tightly closed. Keep cool. Storage temperature above + 5 ° C required.

The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

United Kingdom **EH40/2005 Workplace exposure limits (Fourth Edition 2020)**

Substance name (component)	Type	Value	Note
Xylene, o-,m-,p- or mixed isomers	WEL 8h	220 mg/m³	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
	WEL 8h	50 ppm	
	WEL 15min	441 mg/m³	
	WEL 15min	100 ppm	
ethylbenzene	WEL 8h	441 mg/m³	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
	WEL 8h	100 ppm	
	WEL 15min	552 mg/m³	
	WEL 15min	125 ppm	

United Kingdom **EH40/2005 Workplace exposure limits (Fourth Edition 2020)**

Substance name (component)	Type	Value	Note
styrene (CAS: 85536-20-5)	WEL 8h	430 mg/m³	
	WEL 8h	100 ppm	
	WEL 15min	1080 mg/m³	
	WEL 15min	250 ppm	
toluene (CAS: 85536-20-5)	WEL 8h	191 mg/m³	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
	WEL 8h	50 ppm	
	WEL 15min	384 mg/m³	
	WEL 15min	100 ppm	

Biological limit values

United Kingdom **EH40/2005 Workplace exposure limits (Fourth Edition 2020)**

Name	Parameter	Value	Tested material	Time of sampling
reaction mass of ethylbenzene and xylene	Methylhippuric acids	650 mmol/mol creatinine	Urine	End of shift

DNEL

bis[4-(2,3-epoxypropoxy)phenyl]propane					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	4.93 mg/m³	Chronic effects systemic		
Workers	Dermal	0.75 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	0.87 mg/m³	Chronic effects systemic		
Consumers	Dermal	0.0893 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	0.5 mg/kg bw/day	Chronic effects systemic		

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1.41 mg/m³	Chronic effects systemic		
Workers	Dermal	3.5 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	0.348 mg/m³	Chronic effects systemic		
Consumers	Dermal	1.67 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	0.2 mg/kg bw/day	Chronic effects systemic		

reaction mass of ethylbenzene and xylene					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	442 mg/m³	Acute effects systemic		
Workers	Inhalation	442 mg/m³	Acute effects local		
Workers	Dermal	212 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	221 mg/m³	Chronic effects local		
Workers	Inhalation	221 mg/m³	Chronic effects systemic		
Consumers	Inhalation	260 mg/m³	Acute effects systemic		
Consumers	Inhalation	260 mg/m³	Acute effects local		
Consumers	Dermal	125 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	65.3 mg/m³	Chronic effects systemic		
Consumers	Inhalation	65.3 mg/m³	Chronic effects local		
Consumers	Oral	12.5 mg/kg bw/day	Chronic effects systemic		

Solvent naphtha (coal), xylene-styrene cut					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	289 mg/m³	Acute effects systemic		
Workers	Inhalation	289 mg/m³	Acute effects local		
Workers	Dermal	180 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	77 mg/m³	Chronic effects systemic		
Consumers	Inhalation	174 mg/m³	Acute effects systemic		
Consumers	Inhalation	174 mg/m³	Acute effects local		
Consumers	Dermal	108 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	14.8 mg/m³	Chronic effects systemic		
Consumers	Oral	1.6 mg/kg bw/day	Chronic effects systemic		

PNEC

bis[4-(2,3-epoxypropoxy)phenyl]propane			
Route of exposure	Value	Value determination	Source
Drinking water	0.006 mg/l		

bis[4-(2,3-epoxypropoxy)phenyl]propane			
Route of exposure	Value	Value determination	Source
Water (intermittent release)	0.018 mg/l		
Marine water	0.001 mg/l		
Microorganisms in sewage treatment	10 mg/l		
Freshwater sediment	0.341 mg/kg of dry substance of sediment		
Sea sediments	0.034 mg/kg of dry substance of sediment		
Soil (agricultural)	0.065 mg/kg of dry substance of soil		
Food chain	11 mg/kg of food		

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol			
Route of exposure	Value	Value determination	Source
Drinking water	14 µg/l		
Water (intermittent release)	140 µg/l		
Marine water	1.4 µg/l		
Microorganisms in sewage treatment	2.4 mg/l		
Freshwater sediment	1064 mg/kg of dry substance of sediment		
Sea sediments	106.4 mg/kg of dry substance of sediment		
Soil (agricultural)	212.2 mg/kg of dry substance of soil		
Food chain	8.89 mg/kg of food		

reaction mass of ethylbenzene and xylene			
Route of exposure	Value	Value determination	Source
Drinking water	0.327 mg/l		
Marine water	0.327 mg/l		
Freshwater sediment	12.46 mg/kg of dry substance of sediment		
Sea sediments	12.46 mg/kg of dry substance of sediment		
Soil (agricultural)	2.31 mg/kg of dry substance of soil		
Water (intermittent release)	0.327 mg/l		
Microorganisms in sewage treatment	6.58 mg/l		

Solvent naphtha (coal), xylene-styrene cut			
Route of exposure	Value	Value determination	Source
Drinking water	0.327 mg/l		
Marine water	0.327 mg/l		

Solvent naphtha (coal), xylene-styrene cut			
Route of exposure	Value	Value determination	Source
Water (intermittent release)	0.327 mg/l		
Freshwater sediment	12.46 mg/kg of dry substance		
Sea sediments	12.46 mg/kg of dry substance		
Soil (agricultural)	2.21 mg/kg of dry substance		
Microorganisms in sewage treatment	6.58 mg/l		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

It is not needed. In case of inadequate ventilation wear respiratory protection.

Thermal hazard

Data not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	black
Odour	irritating
Melting point/freezing point	<-20 °C
Boiling point or initial boiling point and boiling range	≥136 °C
Flammability	flammable liquid and vapor
Lower and upper explosion limit	not determined
Flash point	40 °C
Auto-ignition temperature	not determined
reaction mass of ethylbenzene and xylene	432-528 °C
Solvent naphtha (coal), xylene-styrene cut (CAS: 85536-20-5)	488 °C
Decomposition temperature	not applicable
pH	non-soluble (in water)
Kinematic viscosity	>20.5 mm²/s at 40 °C
Kinematic viscosity	900 mm²/s at 22 °C
Solubility in water	insoluble
Solubility in other solvents	dissolves in most organic solvents
Partition coefficient n-octanol/water (log value)	does not apply to mixtures
Vapour pressure	not determined
reaction mass of ethylbenzene and xylene	6.5-9.5 hPa at 20 °C
Solvent naphtha (coal), xylene-styrene cut (CAS: 85536-20-5)	6.5-41.37 hPa at 20 °C

Density and/or relative density	
Density	1.23 g/cm³ at 22 °C
Relative vapour density	>1
Particle characteristics	applies to solids

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with amines, amides.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Based on the available data, the criteria for classification of the mixture are not met.

bis[4-(2,3-epoxypropoxy)phenyl]propane						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		>15000 mg/kg bw		Rat (Rattus norvegicus)	M
Dermal	LD_{50}		>23000 mg/kg bw	24 hours	Rabbit	

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 423	>2000 mg/kg bw		Rat (Rattus norvegicus)	F
Inhalation (aerosols)	LC_{50}	OECD 403	>5000 mg/m³	4 hours	Rat (Rattus norvegicus)	F/M
Dermal	LD_{50}	OECD 402	>2000 mg/kg bw	24 hours	Rat (Rattus norvegicus)	F/M

reaction mass of ethylbenzene and xylene						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	EU B.1	3523 mg/kg bw		Rat	M
Inhalation (vapor)	LC_{50}	EU B.2	27124 mg/m³	4 hours	Rat	M
Skin	LD_{50}		12126 mg/kg bw		Rabbit	M

Solvent naphtha (coal), xylene-styrene cut						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		3523 mg/kg bw		Rat (Rattus norvegicus)	M
Inhalation	LC_{50}		27124 mg/m³	4 hours	Rat (Rattus norvegicus)	F/M
Dermal	LD_{50}		12126 mg/kg bw	24 hours	Rabbit	M

Skin corrosion/irritation

Causes skin irritation.

bis[4-(2,3-epoxypropoxy)phenyl]propane				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Slightly irritating	OECD 404	4 hours	Rabbit

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Irritating	OECD 404	4 hours	Rabbit

reaction mass of ethylbenzene and xylene				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Irritating	EU B.4	4 hours	Rabbit

Solvent naphtha (coal), xylene-styrene cut				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Irritating			

Irritation

reaction mass of ethylbenzene and xylene			
Route of exposure	Result	Exposure time	Species
Inhalation	Irritating		

Serious eye damage/irritation

Causes serious eye irritation.

bis[4-(2,3-epoxypropoxy)phenyl]propane				
Route of exposure	Result	Method	Exposure time	Species
Eye	Slightly irritating	OECD 405		Rabbit

reaction mass of ethylbenzene and xylene				
Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating			Rabbit

Solvent naphtha (coal), xylene-styrene cut				
Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating			

Respiratory or skin sensitisation
May cause an allergic skin reaction.

bis[4-(2,3-epoxypropoxy)phenyl]propane					
Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Sensitizing	OECD 429		Mouse	F

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol					
Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Sensitizing	OECD 429		Mouse	F

Germ cell mutagenicity
Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity
Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity
Suspected of damaging the unborn child.

Toxicity for specific target organ - single exposure
Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

bis[4-(2,3-epoxypropoxy)phenyl]propane							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 408	50 mg/kg bw/day	14 weeks	Rat (Rattus norvegicus)	F/M
Dermal	NOAEL	Systemic effects	OECD 411	100 mg/kg bw/day	13 weeks	Mouse	F/M

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 408	40 mg/kg bw/day	100 days	Rat (Rattus norvegicus)	F/M
Dermal	NOAEL	Systemic effects	OECD 410	1000 mg/kg bw/day	28 days	Rat (Rattus norvegicus)	F/M

reaction mass of ethylbenzene and xylene							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	EU B.32	250 mg/kg bw/day	103 weeks	Rat (Rattus norvegicus)	F/M
Inhalation (vapor)	NOAEC	Systemic effects		3515 mg/m³	13 weeks	Dog	M

Solvent naphtha (coal), xylene-styrene cut							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 408	150 mg/kg bw/day	90 days	Rat (Rattus norvegicus)	F/M
Inhalation (vapor)	NOAEC	Systemic effects		≥3515 mg/m³	13 weeks	Rat (Rattus norvegicus)	M

Aspiration hazard
Based on the available data, the criteria for classification of the mixture are not met.

11.2. Information on other hazards
The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information
12.1. Toxicity
Toxic to aquatic life with long lasting effects.
Acute toxicity

bis[4-(2,3-epoxypropoxy)phenyl]propane					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		2 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC_{50}		1.8 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
ErC_{50}		>11 mg/l	72 hours	Algae (Scenedesmus subspicatus)	
NOEC		4.2 mg/l	72 hours	Algae (Scenedesmus subspicatus)	
IC_{50}		>100 mg/l	3 hours	Aquatic microorganisms	Activated sludge

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol					
Parameter	Method	Value	Exposure time	Species	Environment
LL_{50}	OECD 203	25.8 mg/l	96 hours	Fish (Danio rerio)	
EL_{50}	OECD 202	14 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
EL_{50}	OECD 201	15 mg/l	72 hours	Algae (Desmodesmus subspicatus)	
NOELR	OECD 209	100 mg/l	3 hours	Aquatic microorganisms	Activated sludge

reaction mass of ethylbenzene and xylene					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	2.6 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC_{50}	OECD 201	2.2 mg/l	73 hours	Algae (Pseudokirchneriella subcapitata)	
EC_{50}	OECD 209	>157 mg/l	3 hours	Aquatic microorganisms	Activated sludge

reaction mass of ethylbenzene and xylene					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 201	0.44 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	
IC_{50}		220 mg/kg of dry substance of soil	10 hours	Microorganisms	
EC_{50}	OECD 202	1 mg/l	24 hours	Aquatic invertebrates (Daphnia magna)	

Solvent naphtha (coal), xylene-styrene cut					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		2.6 mg/l	96 hours	Fish (Salmo gairdneri)	
EC_{50}	OECD 201	2.2 mg/l	72 hours	Algae (Selenastrum capricornutum)	
NOEC	OECD 201	0.44 mg/l	72 hours	Algae (Selenastrum capricornutum)	
EC_{50}	OECD 202	1 mg/l	24 hours	Aquatic invertebrates (Daphnia magna)	

Chronic toxicity

bis[4-(2,3-epoxypropoxy)phenyl]propane					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC		0.3 mg/l	21 days	Aquatic invertebrates (Daphnia magna)	

reaction mass of ethylbenzene and xylene					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC		>1.3 mg/l	56 days	Fish (Salmo gairdneri)	
NOEC		0.96 mg/l	7 days	Aquatic invertebrates (Ceriodaphnia dubia)	
NOEC	OECD 301F	16 mg/l	28 days	Aquatic microorganisms	Activated sludge
NOEC		16 mg/kg of dry substance of soil	14 weeks	Invertebrates (Eisenia andrei)	

Solvent naphtha (coal), xylene-styrene cut					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC		0.96 mg/l	7 days	Aquatic invertebrates (Daphnia magna)	
NOEC		>1.3 mg/l	56 days	Fish (Salmo gairdneri)	

12.2. Persistence and degradability

The product is partially biodegradable.

Biodegradability

bis[4-(2,3-epoxypropoxy)phenyl]propane					
Parameter	Method	Value	Exposure time	Environment	Result
					Hardly biodegradable

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol					
Parameter	Method	Value	Exposure time	Environment	Result
	OECD 310	4 %	28 days	Activated sludge	Hardly biodegradable

reaction mass of ethylbenzene and xylene					
Parameter	Method	Value	Exposure time	Environment	Result
					Easily biodegradable

Solvent naphtha (coal), xylene-styrene cut					
Parameter	Method	Value	Exposure time	Environment	Result
			28 days		Easily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation is not expected.

bis[4-(2,3-epoxypropoxy)phenyl]propane						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	OECD 117	3.242				25°C

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	OECD 117	3.6-6.3				25°C

reaction mass of ethylbenzene and xylene						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
BCF		25.9				
Log Pow		3.16				20°C

Solvent naphtha (coal), xylene-styrene cut						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
BCF		25.9				
Log Pow		3.12-3.20				20°C

12.4. Mobility in soil

The product is insoluble in water and does not show mobility in soil.

bis[4-(2,3-epoxypropoxy)phenyl]propane				
Parameter	Method	Value	Environment	Temperature
Koc		445		20°C

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol				
Parameter	Method	Value	Environment	Temperature
Log Koc		5.88		20°C

reaction mass of ethylbenzene and xylene				
Parameter	Method	Value	Environment	Temperature
Log Koc	OECD 121	2.73		

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Danger of environmental contamination, follow the applicable waste disposal regulations. Store unused product and contaminated packaging in closed containers for waste collection and hand over for disposal to a specialized company authorized to conduct such activity. Do not pour unused product into drains. It must not be disposed of together with municipal waste. Empty packaging can be used for energy in a waste incineration plant or collected in a landfill with an appropriate classification. Perfectly cleaned packaging can be recycled. The classification of waste may change depending on where it is generated.

Waste management legislation

Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. No. 871 of 2007). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1993

14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (contains: reaction mass of ethylbenzene and xylene)

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

III

14.5. Environmental hazards

Yes.

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.	**30**
UN number	**1993**
Classification code	F1
Safety signs	3+hazardous for the environment

Road transport - ADR

Special provisions	274, 601
Limited quantities	5 L
Excepted quantities	E1
Packaging	
Packing instructions	P001, IBC03, LP01, R001
Mixed packing provisions	MP19
Portable tanks and bulk containers	
Guidelines	T4
Special provisions	TP1, TP29
ADR tank	
Tank code	LGBF
Vehicles for tank carriage	FL
Transport category	3
Tunnel restriction code	(D/E)
Special provision for	
packages	V12
operation	S2

Railway transport - RID

Special provisions	274, 601
Excepted quantities	E1
Packaging	
Packing instructions	P001, IBC03, LP01, R001
Mixed packing provisions	MP19
Portable tanks and bulk containers	
Guidelines	T4
Special provisions	TP1, TP29
RID Tanks	
Tank code	LGBF
Transport category	0
Special provision for	
packages	W12

Marine transport - IMDG

EmS (emergency plan)	F-E, S-E
MFAG	310

SECTION 15: Regulatory information

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

Clean Air Act 1993 as amended. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Public health act 1961. Environmental Protection Act 1990 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

Solvent naphtha (coal), xylene-styrene cut

Restriction	Conditions of restriction
28	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: "Restricted to professional users". 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.

Solvent naphtha (coal), xylene-styrene cut

Restriction	Conditions of restriction
29	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: "Restricted to professional users". 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out (mixture).

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H312+H332	Harmful in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P391	Collect spillage.
P501	Dispose of contents/container to according to the instructions of the manufacturer or person authorized to dispose of waste.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EL_{50}	Effective Loading for 50% of the tested organisms
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
LL_{50}	Lethal Loading for 50% of tested organisms
log Kow	Octanol-water partition coefficient
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NOELR	No Observed Effect Loading Rate
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Repr.	Reproductive toxicity

Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

This safety data sheet replaces version: 1.0 dated 15.02.2023.
Updated sections: 1,4,7,13,15.

More information

Classification procedure - calculation method and based on tests of physicochemical properties.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.