SAFETY DATA SHEET

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

Nexler EPOLIS EP-200 składnik B

Creation date	31st August 2020		
Revision date	05th August 2024	Version	2.2

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

1.1. Product identifier — Nexler EPOLIS EP-200 składnik B

Substance / mixture: mixture

UFI: 33UJ-G040-M00D-4RHE

Other mixture names

Nexler EPOLIS EP-200 component B

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

Mixture's intended use

Two-component epoxy primer.

Main intended use

PC-CON-5 Construction chemicals

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.

Acute Tox. 4, H302+H332
Skin Corr. 1C, H314
Skin Sens. 1, H317
Eye Dam. 1, H318
STOT RE 2, H373
Aquatic Chronic 3, H412

Most serious adverse effects on human health and the environment

May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful if swallowed or if inhaled. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

benzyl alcohol
formaldehyde, polymer with aniline, hydrogenated
N,N'-bis(3-aminopropyl)ethylenediamine
2,4,6-tris(dimethylaminomethyl)phenol
N-(2-aminoethyl)-1,3-propanediamine

Hazard statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
H302+H332	Harmful if swallowed or if inhaled.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
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. Container must be fitted with child-resistant fastening.

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: 603-057-00-5 CAS: 100-51-6 EC: 202-859-9 Registration number: 01-2119492630-38	benzyl alcohol	25-<50	Acute Tox. 4, H302+H332 Eye Irrit. 2, H319	
CAS: 135108-88-2 EC: 603-894-6 Registration number: 01-2119983522-33	formaldehyde, polymer with aniline, hydrogenated	25-<50	Acute Tox. 3, H301 Skin Corr. 1C, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT RE 2, H373 (kidneys) (ingestion) Aquatic Chronic 3, H412	1
CAS: 10563-26-5 EC: 234-147-9 Registration number: 01-2119976331-37	N,N'-bis(3-aminopropyl)ethylenediamine	5-<10	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318	

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-069-00-0 CAS: 90-72-2 EC: 202-013-9 Registration number: 01-2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol	5-<10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	
CAS: 13531-52-7 EC: 236-882-0 Registration number: 01-2120097861-45	N-(2-aminoethyl)-1,3-propanediamine	0,1-<1	Acute Tox. 4, H302 Acute Tox. 2, H310 Skin Corr. 1A, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318	

Notes

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

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. Take care of your own safety, do not let the affected person walk! Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse cautiously with water for several minutes. 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. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

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

If inhaled

Inhaling vapours can cause corrosion of the breathing system. Cough, headache.

If on skin

Causes severe skin burns. May cause an allergic skin reaction.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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. As a result of thermal decomposition or reactions with incompatible substances, compounds such as nitric acid, ammonia, nitrogen oxides, aldehydes may be formed. Nitrogen oxides can react with water vapor to form caustic nitric acid.

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. 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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

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 concentrations exceeding the occupational exposure limits. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed parts of the body thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. 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. Store locked up. Keep container tightly closed. Storage temperature required between +10 ° C and +25 ° C.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

DNEL

2,4,6-tris(dimethylaminomethyl)phenol					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.53 mg/m³	Chronic effects systemic		
Workers	Inhalation	2.1 mg/m³	Acute effects systemic		

2,4,6-tris(dimethylaminomethyl)phenol					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	0.15 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	0.6 mg/kg bw/day	Acute effects systemic		
Consumers	Inhalation	0.13 mg/m³	Chronic effects systemic		
Consumers	Inhalation	0.13 mg/m³	Acute effects systemic		
Consumers	Dermal	0.075 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	0.075 mg/kg bw/day	Acute effects systemic		
Consumers	Oral	0.075 mg/kg bw/day	Chronic effects systemic		

benzyl alcohol					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	22 mg/m³	Chronic effects systemic		
Workers	Inhalation	110 mg/m³	Acute effects systemic		
Workers	Dermal	8 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	40 mg/kg bw/day	Acute effects systemic		
Consumers	Inhalation	5.4 mg/m³	Chronic effects systemic		
Consumers	Inhalation	27 mg/m³	Acute effects systemic		
Consumers	Dermal	4 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	20 mg/kg bw/day	Acute effects systemic		
Consumers	Oral	4 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	20 mg/kg bw/day	Acute effects systemic		

formaldehyde, polymer with aniline, hydrogenated					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.2 mg/m³	Chronic effects systemic		
Workers	Inhalation	2 mg/m³	Acute effects systemic		
Workers	Dermal	2 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	6 mg/kg bw/day	Acute effects systemic		

N-(2-aminoethyl)-1,3-propanediamine					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.62 mg/m³	Chronic effects systemic		
Workers	Dermal	0.18 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	0.094 mg/m³	Chronic effects systemic		
Consumers	Dermal	0.063 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	0.063 mg/kg bw/day	Chronic effects systemic		

N,N'-bis(3-aminopropyl)ethylenediamine					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1.234 mg/m³	Chronic effects systemic		
Workers	Dermal	0.35 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	0.217 mg/m³	Chronic effects systemic		
Consumers	Dermal	0.125 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	0.125 mg/kg bw/day	Chronic effects systemic		

PNEC

2,4,6-tris(dimethylaminomethyl)phenol			
Route of exposure	Value	Value determination	Source
Drinking water	0.046 mg/l		
Marine water	0.005 mg/l		
Water (intermittent release)	0.46 mg/l		
Microorganisms in sewage treatment	0.2 mg/l		
Freshwater sediment	0.262 mg/kg of dry substance of sediment		
Sea sediments	0.026 mg/kg of dry substance of sediment		
Soil (agricultural)	0.025 mg/kg of dry substance of soil		

benzyl alcohol			
Route of exposure	Value	Value determination	Source
Drinking water	1 mg/l		
Marine water	0.1 mg/l		
Water (intermittent release)	2.3 mg/l		

benzyl alcohol			
Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	39 mg/l		
Freshwater sediment	5.27 mg/kg of dry substance of sediment		
Sea sediments	0.527 mg/kg of dry substance of sediment		
Soil (agricultural)	0.456 mg/kg of dry substance of soil		

formaldehyde, polymer with aniline, hydrogenated			
Route of exposure	Value	Value determination	Source
Drinking water	0.015 mg/l		
Water (intermittent release)	0.15 mg/l		
Marine water	0.002 mg/l		
Microorganisms in sewage treatment	1.9 mg/l		
Freshwater sediment	15 mg/kg of dry substance of sediment		
Sea sediments	1.5 mg/kg of dry substance of sediment		
Soil (agricultural)	1.8 mg/kg of dry substance of soil		

N-(2-aminoethyl)-1,3-propanediamine			
Route of exposure	Value	Value determination	Source
Drinking water	0.144 mg/l		
Water (intermittent release)	0.259 mg/l		
Marine water	0.014 mg/l		
Microorganisms in sewage treatment	80 mg/l		
Freshwater sediment	0.648 mg/kg of dry substance of sediment		
Sea sediments	0.065 mg/kg of dry substance of sediment		
Soil (agricultural)	0.045 mg/kg of dry substance of soil		

N,N'-bis(3-aminopropyl)ethylenediamine			
Route of exposure	Value	Value determination	Source
Drinking water	0.144 mg/l		
Water (intermittent release)	0.43 mg/l		
Marine water	0.014 mg/l		
Microorganisms in sewage treatment	3.4 mg/l		

N,N'-bis(3-aminopropyl)ethylenediamine			
Route of exposure	Value	Value determination	Source
Freshwater sediment	45.3 mg/kg of dry substance of sediment		
Sea sediments	4.53 mg/kg of dry substance of sediment		
Soil (agricultural)	8.96 mg/kg of dry substance of soil		

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

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	amber
Odour	amine
Melting point/freezing point	<-20 °C
Boiling point or initial boiling point and boiling range	>200 °C
Flammability	the product is not flammable
Lower and upper explosion limit	not applicable
Flash point	>100 °C
Auto-ignition temperature	not determined
benzyl alcohol (CAS: 100-51-6)	436 °C
Decomposition temperature	not applicable
pH	11 (10% solution)
Kinematic viscosity	200 mm²/s at 25 °C
Solubility in water	partially soluble
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
benzyl alcohol (CAS: 100-51-6)	0.07 hPa at 20 °C
Density and/or relative density	
Density	1 g/cm³
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 peroxides, aldehydes, ketones, epoxy resins.

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

Reactive metals (e.g. sodium, calcium, zinc, etc.).
Substances which react with hydroxyl compounds.
Carefully! N-Nitrosamines, many of which are known to be potentially carcinogenic, may form when the product comes into contact with nitric acid, nitrites or atmospheres with high concentrations of nitrous oxide.
Nitric acid (III) and other nitrosating agents.
Organic acids (e.g. acetic acid, citric acid, etc.).
Inorganic acids.
Sodium hypochlorite.
The product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reaction with peroxides can rapidly decompose the peroxide and create an explosion hazard.
Oxidizing factors.

10.6. Hazardous decomposition products

Not developed under normal uses. As a result of thermal decomposition or reactions with incompatible substances, compounds such as nitric acid, ammonia, nitrogen oxides, aldehydes, nitrosamines may be formed. Nitrogen oxides can react with water vapor to form caustic nitric acid.

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

Harmful if swallowed or if inhaled.

2,4,6-tris(dimethylaminomethyl)phenol						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Dermal	LD_{50}		>1 ml/kg bw	6 hours	Rat (Rattus norvegicus)	M
Oral	LD_{50}	OECD 401	2169 mg/kg bw		Rat (Rattus norvegicus)	F/M

benzyl alcohol						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		1620 mg/kg bw		Rat (Rattus norvegicus)	M
Inhalation	LD_{50}	OECD 403	>4.178 mg/l of air	4 hours	Rat (Rattus norvegicus)	F/M
Dermal	LD_{50}	EPA OTS 798.1100	>2000 mg/kg bw	24 hours	Rabbit	F/M

formaldehyde, polymer with aniline, hydrogenated						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 423	300 mg/kg bw		Rat (Rattus norvegicus)	F/M

N-(2-aminoethyl)-1,3-propanediamine						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	654 mg/kg bw		Rat (Rattus norvegicus)	F/M
Dermal	LD_{50}	OECD 402	184 mg/kg bw		Rabbit	F/M

N,N'-bis(3-aminopropyl)ethylenediamine						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	1140 mg/kg bw		Rat (Rattus norvegicus)	F/M
Dermal	LD_{50}	OECD 402	>200 mg/kg bw	24 hours	Rabbit	F/M

Skin corrosion/irritation

Causes severe skin burns and eye damage.

2,4,6-tris(dimethylaminomethyl)phenol				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Corrosive	OECD 435		

benzyl alcohol				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Slightly irritating	OECD 404	4 hours	Rabbit

formaldehyde, polymer with aniline, hydrogenated				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Corrosive	OECD 435		

N-(2-aminoethyl)-1,3-propanediamine				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Corrosive	OECD 404	20 hours	Rabbit

N,N'-bis(3-aminopropyl)ethylenediamine				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Corrosive	OECD 404		Rabbit

Serious eye damage/irritation

Causes severe skin burns and eye damage.

2,4,6-tris(dimethylaminomethyl)phenol				
Route of exposure	Result	Method	Exposure time	Species
Eye	Corrosive			

benzyl alcohol				
Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating	OECD 405	24 hours	Rabbit

N-(2-aminoethyl)-1,3-propanediamine				
Route of exposure	Result	Method	Exposure time	Species
Eye	Corrosive, Serious eye damage	OECD 405	8 days	Rabbit

N,N'-bis(3-aminopropyl)ethylenediamine				
Route of exposure	Result	Method	Exposure time	Species
Eye	Corrosive	OECD 405		Rabbit

Respiratory or skin sensitisation
May cause an allergic skin reaction.

formaldehyde, polymer with aniline, hydrogenated					
Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Sensitizing	OECD 406			

N-(2-aminoethyl)-1,3-propanediamine					
Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Sensitizing	OECD 406		Guinea-pig (Cavia aperea f. porcellus)	F

N,N'-bis(3-aminopropyl)ethylenediamine					
Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Sensitizing	OECD 406		Guinea-pig (Cavia aperea f. porcellus)	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
Based on the available data, the criteria for classification of the mixture are not met.

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

2,4,6-tris(dimethylaminomethyl)phenol							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 422	15 mg/kg bw/day	54 days	Rat (Rattus norvegicus)	F/M

benzyl alcohol							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 451	400 mg/kg bw/day	103 weeks	Rat (Rattus norvegicus)	F/M
Inhalation (aerosols)	NOAEC	Local effects, Systemic effects	OECD 412	1072 mg/m³ of air	4 weeks	Rat (Rattus norvegicus)	F/M

formaldehyde, polymer with aniline, hydrogenated							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 407	15 mg/kg bw/day	28 days	Rat (Rattus norvegicus)	F/M

N-(2-aminoethyl)-1,3-propanediamine							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 422	30 mg/kg bw/day	29 days	Rat (Rattus norvegicus)	M

N,N'-bis(3-aminopropyl)ethylenediamine							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	Systemic effects	OECD 422	30 mg/kg bw/day	53 days	Rat (Rattus norvegicus)	F

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

Harmful to aquatic life with long lasting effects.

Acute toxicity

2,4,6-tris(dimethylaminomethyl)phenol					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		175 mg/l	96 hours	Fish (Cyprinus carpio)	
EC_{50}		718 mg/l	96 hours	Aquatic invertebrates (Palaeomonetes vulgaris)	
ErC_{50}	OECD 201	46.7 mg/l	72 hours	Algae (Selenastrum capricornutum)	
NOEC	OECD 201	25.1 mg/l	72 hours	Algae (Selenastrum capricornutum)	

benzyl alcohol					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	EPA OPP 72-1	460 mg/l	96 hours	Fish (Pimephales promelas)	
EC_{50}	OECD 202	230 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
EC_{50}	OECD 201	770 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	
NOEC	OECD 201	310 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	
IC_{50}		390 mg/l	24 hours	Aquatic microorganisms (Nitrosomonas)	

formaldehyde, polymer with aniline, hydrogenated					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	63 mg/l	96 hours	Fish (Poecilia reticulata)	
ErC_{50}		43.9 mg/l	72 hours	Algae (Desmodesmus subspicatus)	
EC_{50}	OECD 202	15.4 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
NOEC		1.2 mg/l	72 hours	Algae (Desmodesmus subspicatus)	
EC_{50}		187 mg/l	3 hours	Aquatic microorganisms	Activated sludge

N-(2-aminoethyl)-1,3-propanediamine					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		>220 mg/l	96 hours	Fish (Leuciscus idus)	
EC_{50}		25.93 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
EC_{50}	OECD 201	>460.2 mg/l	72 hours	Algae (Desmodesmus subspicatus)	
EC_{50}		66 mg/l	17 hours	Aquatic microorganisms (Pseudomonas putida)	

N,N'-bis(3-aminopropyl)ethylenediamine					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		>200 mg/l	96 hours	Fish (Leuciscus idus)	
EC_{50}	EU C.2 (84/449/EEC)	42.54 mg/l	48 hours	Aquatic invertebrates (Daphnia magna)	
NOEC	OECD 201	50 mg/l	72 hours	Algae (Desmodesmus subspicatus)	
EC_{50}	OECD 209	720 mg/l	3 hours	Aquatic microorganisms	Activated sludge

N,N'-bis(3-aminopropyl)ethylenediamine					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 209	34 mg/l	3 hours	Aquatic microorganisms	Activated sludge

Chronic toxicity

2,4,6-tris(dimethylaminomethyl)phenol					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC		2 mg/l	28 days	Aquatic microorganisms	Activated sludge

benzyl alcohol					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 211	51 mg/l	21 days	Aquatic invertebrates (Daphnia magna)	

N-(2-aminoethyl)-1,3-propanediamine					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 211	7.2 mg/l	21 days	Aquatic invertebrates (Daphnia magna)	

N,N'-bis(3-aminopropyl)ethylenediamine					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 211	7.2 mg/l	21 days	Aquatic invertebrates (Daphnia magna)	

12.2. Persistence and degradability

The product is partially biodegradable.

Biodegradability

2,4,6-tris(dimethylaminomethyl)phenol					
Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301D	4 %	28 days	Activated sludge	Hardly biodegradable

benzyl alcohol					
Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301A	95-97 %	21 days		Easily biodegradable

formaldehyde, polymer with aniline, hydrogenated					
Parameter	Method	Value	Exposure time	Environment	Result
					Not biodegradable

N-(2-aminoethyl)-1,3-propanediamine					
Parameter	Method	Value	Exposure time	Environment	Result
					Biodegradable

N,N'-bis(3-aminopropyl)ethylenediamine					
Parameter	Method	Value	Exposure time	Environment	Result
					Easily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation is not expected.

2,4,6-tris(dimethylaminomethyl)phenol						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow		-0.66				21,5°C

benzyl alcohol						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow		1.05				20°C

formaldehyde, polymer with aniline, hydrogenated						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow		2.68				21°C

N-(2-aminoethyl)-1,3-propanediamine						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	OECD 107	-1.67				23°C

N,N'-bis(3-aminopropyl)ethylenediamine						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	OECD 107	-1.55				23°C

12.4. Mobility in soil

The product shows low mobility in soil.

benzyl alcohol				
Parameter	Method	Value	Environment	Temperature
Koc		15.7		20°C

formaldehyde, polymer with aniline, hydrogenated				
Parameter	Method	Value	Environment	Temperature
Koc	OECD 121	9988		20°C

N,N'-bis(3-aminopropyl)ethylenediamine				
Parameter	Method	Value	Environment	Temperature
Koc		3090		20°C

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 2735

14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE, N.O.S. (contains: formaldehyde, polymer with aniline, hydrogenated)

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

III

14.5. Environmental hazards

No.

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.	**80**
UN number	**2735**
Classification code	C7
Safety signs	8

Road transport - ADR	
Special provisions	274
Limited quantities	5 L
Excepted quantities	E1
Packaging	
Packing instructions	P001, IBC03, LP01, R001
Mixed packing provisions	MP19
Portable tanks and bulk containers	
Guidelines	T7
Special provisions	TP1, TP28
ADR tank	
Tank code	L4BN
Vehicles for tank carriage	AT
Transport category	3
Tunnel restriction code	(E)
Special provision for	
packages	V12
Railway transport - RID	
Special provisions	274
Excepted quantities	E1
Packaging	
Packing instructions	P001, IBC03, LP01, R001
Mixed packing provisions	MP19
Portable tanks and bulk containers	
Guidelines	T7
Special provisions	TP1, TP28
RID Tanks	
Tank code	L4BN
Transport category	3
Special provision for	
packages	W12
Air transport - ICAO/IATA	
Packaging instructions for limited amount	Y841
Packaging instructions passenger	852
Cargo packaging instructions	856
Marine transport - IMDG	
EmS (emergency plan)	F-A, S-B
MFAG	320

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).

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

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
H412	Harmful to aquatic life with long lasting effects.
H302+H332	Harmful if swallowed 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.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
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
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
log Kow	Octanol-water partition coefficient
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
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)
Eye Dam.	Serious eye damage
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated 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 2.1 dated 18/03/2022.
Updated sections: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15.

More information

Classification procedure - calculation method.

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.