SAFETY DATA SHEET

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

POLYMETAL

Creation date	22. July 2012		
Revision date	06. March 2018	Version	2.0

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

1.1. Product identifier

Substance / mixture	mixture
Number	1 01.0019

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

mixture's intended use	Universal repair material.
Disapproved uses of mixture	For professional use only.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	RETECH, s.r.o.
Address	Vackova 1541/4, Praha 5 - Stodůlky, 155 00 Czech Republic
Identification number (ID)	25018205
Phone	+420327596428
E-mail	info@retech.cz
Web address	www.retech.com

Competent person responsible for the safety data sheet

Name	RETECH, s.r.o.
E-mail	info@retech.cz

1.4. Emergency telephone number

RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification

2.1. Substance or mixture classification

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

The mixture is classified as dangerous.

Skin Irrit. 2, H315
Skin Sens. 1, H317
Eye Irrit. 2, H319
Aquatic Chronic 3, H412

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

Most serious adverse effects on human health and the environment

Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Warning

Hazardous substances

epoxy resin (number average molecular weight ≤ 700)
2,4,6-tris(dimethylaminomethyl) phenol

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container to in accordance with national regulations.

Supplemental information

EUH 205	Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

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

Chemical characterization

Mixture of substances and additives specified below.

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.
CAS: 25068-38-6 EC: 500-033-5 Registration number: 01-2119456619-26	epoxy resin (number average molecular weight ≤ 700)	7-13	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific concentration limit: Skin Irrit. 2, H315: C ≥ 5 % Eye Irrit. 2, H319: C ≥ 5 %	
CAS: 100-51-6 EC: 202-859-9	benzyl alcohol	3-7	Acute Tox. 4, H302+H332 Eye Irrit. 2, H319	
CAS: 9003-36-5 EC: 500-006-8 Registration number: 01-2119454392-40	formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	1-3	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	
CAS: 90-72-2 EC: 202-013-9	2,4,6-tris(dimethylaminomethyl) phenol	1-3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Eye Dam. 1, H318 Aquatic Chronic 3, H412	

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. It may be dangerous to the person providing aid to give mouth-to -mouth resuscitation. Rinse immediately contaminated clothing with plenty of water before removing clothes. Or wear gloves.

Inhalation

Transfer the affected person to the fresh air and ensure calm environment for body and mind. Remove person to fresh air and keep comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Provide medical treatment if irritation, dyspnoea or other symptoms persist. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Symptoms of poisoning may manifest after many hours, medical supervision is necessary for 48 hours after the accident.

Skin contact

Wash the affected area with plenty of water, lukewarm if possible. Remove contaminated clothes. Rinse immediately contaminated clothing with plenty of water before removing clothes. Or wear gloves. Provide medical treatment. In the event of any complaints or symptoms, avoid further exposure. Wash contaminated clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

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.

Ingestion

Rinse out the mouth with clean water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If the person vomits by himself, make sure that the vomit is not inhaled. Provide medical treatment. In the event of unconsciousness, do not provide food by mouth.

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

Inhalation

Exposure to decomposition products may cause a health hazard. Symptoms of poisoning may manifest after many hours.

Skin contact

Causes severe skin burns. May cause an allergic skin reaction. Adverse symptoms may include the following: Redness, irritation.

Eye contact

Causes serious eye damage. Adverse symptoms may include the following: Painful reddening, irritation. Watering.

Ingestion

Irritating to mouth, throat and stomach.

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

In case of inhalation of decomposition products in a fire, symptoms may be delayed. Symptoms of poisoning may manifest after many hours, medical supervision is necessary for 48 hours after the accident. Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Accommodate extinguishing components to the location of fire.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst. Harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Dangerous outcomes such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides are formed at high temperature and in fire. Halogenated compounds. Metal oxide/oxides.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Evacuate area. No action shall be taken involving any personal risk or without suitable training.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate area. Keep unprotected persons away. Do not touch or walk through spilt material. Remove all ignition sources. Do not inhale aerosols. Do not inhale dust. Provide sufficient ventilation. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment for work.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains. In the event of substantial pollution, contact respective authorities. Water polluting material. May be harmful to the environment if released in large quantities.

6.3. Methods and material for containment and cleaning up

Stop leak if safe to do so. Move containers from fire area if safe to do. Use non-sparking tools. Small spill: Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of the collected material according to the instructions in the section 13. Large spill: Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures: Use personal protective equipment as per Section 8. Persons with a history of skin sensitization problems should not be employed in any process inwhich this product is used. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not inhale gases and vapours. Keep only in original container. Once the product is used, the package has to be tightly closed so that leakage of the mixture is prevented. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Do no eat, drink or smoke when using this product. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container. Protect from sunlight. Store in tightly closed containers in a cool, dry place intended for this purpose. Store away from other materials. Do not store together with food, drink and animal feed. Once the product is used, the package has to be tightly closed so that leakage of the mixture is prevented. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

The specific requirements or rules relating to the substance/mixture

Store in accordance with local regulations.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

DNEL

epoxy resin (number average molecular weight ≤ 700)

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	12.25 mg/m³	Systemic chronic effects	
Workers	Inhalation	12.25 mg/m³	Systemic acute effects	
Workers	Dermal	8.33 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	8.33 mg/kg bw/day	Systemic acute effects	
Consumers	Dermal	3.571 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	3.571 mg/kg bw/day	Systemic acute effects	
Consumers	Oral	0.75 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	0.75 mg/kg bw/day	Systemic acute effects	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	29.39 mg/m³	Systemic chronic effects	
Workers	Dermal	104.15 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	0.0083 mg/cm²	Local acute effects	
Consumers	Inhalation	8.7 mg/m³	Systemic chronic effects	
Consumers	Dermal	62.5 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	6.25 mg/kg bw/day	Systemic chronic effects	

PNEC

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Value	Determining method
Freshwater environment	0.006 mg/l	
Water (occasional leak)	0.018 mg/l	
Seawater	0.001 mg/l	
Microorganisms in wastewater treatment plants	10 mg/l	
Freshwater sediment	0.996 mg/kg of dry substance of sediment	
Sea sediments	0.1 mg/kg of dry substance of sediment	
Soil (agricultural)	0.196 mg/kg of dry substance of soil	
Food chain	11 mg/kg of food	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Value	Determining method
Freshwater environment	0.003 mg/l	
Water (occasional leak)	0.025 mg/l	
Seawater	0 mg/l	
Microorganisms in wastewater treatment plants	10 mg/l	
Freshwater sediment	0.294 mg/kg of dry substance of sediment	
Sea sediments	0.029 mg/kg of dry substance of sediment	
Soil (agricultural)	0.237 mg/kg of dry substance of soil	

Other information of limit values

WARNING! This product contains quartz, which has been classified by IARC as carcinogenic for humans (Group 1), and which can cause silicosis and lung cancer following exposure to respirable dust. It is therefore important to take particular care to avoid inhalation exposure when mechanically processing cured material (e.g. grinding, sanding, sawing).

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Take off contaminated clothing. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. And wash it before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Wear approved chemical safety goggles where eye exposure is reasonably probable.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Observe other recommendations of the manufacturer. Other protection: protective workwear. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Thermal hazard

Not available.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

More information

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratoryprotective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689, EN 14042, EN 482. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste
Physical state	liquid at 20°C
color	blue / yellow
Odour	characteristic
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	>100 °C ([DIN 51758 EN 22719 (Pensky-Martens Closed Cup)])
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

data not available

9.2. Other information

Density	1 g/cm^3 at 25 °C
ignition temperature	data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

When used in the standard way, there is not any dangerous reaction with other substances.

10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Not developed under normal uses.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2,4,6-tris(dimethylaminomethyl) phenol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	2169 mg/kg		Rat	F/M
Dermal	LD_{50}	>971 mg/kg		Rat	M

benzyl alcohol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Inhalation (dust/mist)	LC_{50}	>4178 mg/m³	4 hour	Rat	F/M
Oral	LD_{50}	1620 mg/kg		Rat	M

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	>2000 mg/kg		Rat	
Dermal	LD_{50}	>2000 mg/kg		Rat	
Inhalation (vapor)	LC 0	0.00001 ppm	5 hour	Rat	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Dermal	LD_{50}	>2000 mg/kg		Rat	F/M
Oral	LD_{50}	>5000 mg/kg		Rat	F/M

Skin corrosion/irritation

Causes skin irritation.

2,4,6-tris(dimethylaminomethyl) phenol

Route of exposure	Result	Method	Time of exposure	Species
Oral	Caustic	OECD 404		Rabbit

benzyl alcohol

Route of exposure	Result	Method	Time of exposure	Species
Skin	Not irritating	OECD 404		Rabbit

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Result	Method	Time of exposure	Species
Dermal	Slightly irritating	OECD 404		Rabbit

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Result	Method	Time of exposure	Species
Skin	Slightly irritating	OECD 404		Rabbit

Serious eye damage/irritation

Causes serious eye irritation.

2,4,6-tris(dimethylaminomethyl) phenol

Route of exposure	Result	Method	Time of exposure	Species	Source
Eye	Caustic			Rabbit	EPA CFR

benzyl alcohol

Route of exposure	Result	Method	Time of exposure	Species	Source
Eye	Irritating	OECD 405		Rabbit	

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Result	Method	Time of exposure	Species	Source
Eye	Slightly irritating	OECD 405		Rabbit	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Result	Method	Time of exposure	Species	Source
Eye	Not irritating	OECD 405		Rabbit	

Sensitization

benzyl alcohol

Route of exposure	Result	Method	Time of exposure	Species	Sex
Dermal	Not sensitizing			Guinea-pig	

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Result	Method	Time of exposure	Species	Sex
Dermal	Sensitizing	OECD 429		Mouse	

Respiratory or skin sensitisation

May cause an allergic skin reaction.

2,4,6-tris(dimethylaminomethyl) phenol

Route of exposure	Result	Method	Time of exposure	Species	Sex	Source
Dermal	Not sensitizing	OECD 406		Hamster		

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Result	Method	Time of exposure	Species	Sex	Source
Skin	Sensitizing	OECD 429		Mouse		Local Lymph Node Assay

Mutagenicity

2,4,6-tris(dimethylaminomethyl) phenol

Result	Method	Time of exposure	Specific target organ	Species	Sex
Negative	OECD 471			Bacteria	
Negative	OECD 476				
Negative	OECD 473				

benzyl alcohol

Result	Method	Time of exposure	Specific target organ	Species	Sex
Negative	OECD 474				

epoxy resin (number average molecular weight ≤ 700)

Result	Method	Time of exposure	Specific target organ	Species	Sex
Mutagenic	OECD 471			Bacteria	
Mutagenic	OECD 476				
Negative	OECD 478				
Negative	EPA OPPTS 870.5100				

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Result	Method	Time of exposure	Specific target organ	Species	Sex
Mutagenic	OECD 471			Bacteria	
Mutagenic	OECD 476				
Mutagenic	OECD 473				
Negative	OECD 474				
Negative	OECD 486				

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

benzyl alcohol

Route of exposure	Parameter	Method	Value	Time of exposure	Result	Species	Sex
Oral		OECD 453		103 week (5 days/week)	Negative	Rat	

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Parameter	Method	Value	Time of exposure	Result	Species	Sex
Oral		OECD 453		2 year (7 days/week)	Negative	Rat	
Dermal		OECD 453		2 year (5 days/week)	Negative	Rat	

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Parameter	Method	Value	Time of exposure	Result	Species	Sex
Dermal		OECD 453		2 year (3 days/week)	Negative	Mouse	

Reproductive toxicity

Based on available data the classification criteria are not met.

benzyl alcohol

	Parameter	Method	Value	Result	Species	Sex	Determining method	Source
	NOAEL		550 mg/kg		Mouse			

epoxy resin (number average molecular weight ≤ 700)

	Parameter	Method	Value	Result	Species	Sex	Determining method	Source
	NOEL	OECD 416	540 mg/kg		Rat		Reproduction	
Evolution toxicity	NOEL	OECD 414	>540 mg/kg		Rat			
	NOEL		>300 mg/kg		Rabbit			EPA CFR
Evolution toxicity	NOEAL	OECD 414	180 mg/kg		Rabbit			

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

	Parameter	Method	Value	Result	Species	Sex	Determining method	Source
Effects on fertility	NOEL	OECD 416	540 mg/kg		Rat			
	NOEL	OECD 422			Rat			
Evolution toxicity	NOEL		>300 mg/kg		Rabbit	F		EPA CFR

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

2,4,6-tris(dimethylaminomethyl) phenol

Route of exposure	Parameter	Method	Value	Time of exposure	Specific target organ	Result	Species	Sex
	NOEL	OECD 422	15 mg/kg		Liver			
	NOEL	OECD 422	15 mg/kg		Spleen			

benzyl alcohol

Route of exposure	Parameter	Method	Value	Time of exposure	Specific target organ	Result	Species	Sex
	NOAEL		400 mg/kg		Nervous system			

benzyl alcohol

Route of exposure	Parameter	Method	Value	Time of exposure	Specific target organ	Result	Species	Sex
Inhalation (dust/mist)	NOEC	OECD 412	1072 mg/m³	28/14 day				

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Route of exposure	Parameter	Method	Value	Time of exposure	Specific target organ	Result	Species	Sex
Oral	NOAEL	OECD 408	250 mg/kg	90 day				

Repeated dose toxicity

epoxy resin (number average molecular weight ≤ 700)

Route of exposure	Parameter	Result	Method	Value	Time of exposure	Species	Sex
Oral	NOAEL		OECD 408	50 mg/kg	90 day		
Dermal	NOEL		OECD 411	10 mg/kg	90 day		
Dermal	NOEAL		OECD 411	100 mg/kg	90 day		

Aspiration hazard

Based on available data the classification criteria are not met.

WARNING! This product contains quartz, which has been classified by IARC as carcinogenic for humans (Group 1), and which can cause silicosis and lung cancer following exposure to respirable dust. It is therefore important to take particular care to avoid inhalation exposure when mechanically processing cured material (e.g. grinding, sanding, sawing).

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

2,4,6-tris(dimethylaminomethyl) phenol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
ErC_{50}	OECD 201	84 mg/l	72 hour	Algae			
LC_{50}		718 mg/l	96 hour	Daphnia			
LC_{50}		175 mg/l	96 hour	Fishes			

benzyl alcohol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
EC_{50}	OECD 202	230 mg/l	48 hour	Daphnia			
EgC_{50}	OECD 201	770 mg/l	72 hour	Algae			
LC_{50}		460 mg/l	96 hour	Fishes			EPA OPPTS

epoxy resin (number average molecular weight ≤ 700)

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
EC_{50}		9.4 mg/l	72 hour	Algae			EPA CFR
EC_{50}	OECD 202	1.7 mg/l	48 hour	Daphnia (Daphnia magna)			
IC_{50}		>100 mg/l	3 hour	Bacteria			
LC_{50}	OECD 203	1.5 mg/l	96 hour	Fishes		Toxicity test	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
EC_{50}	OECD 201	1.8 mg/l	72 hour	Algae			
EC_{50}	OECD 202	1.6 mg/l	48 hour	Daphnia			
IC_{50}	OECD 202	>100 mg/l	3 hour	Bacteria			
LC_{50}	OECD 203	0.55 mg/l	96 hour	Fishes			

Chronic toxicity

2,4,6-tris(dimethylaminomethyl) phenol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOEC		6.25 mg/l	72 hour	Algae		

benzyl alcohol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOEC	OECD 201	310 mg/l	72 hour	Algae		
NOEC	OECD 211	51 mg/l	21 day	Daphnia (Daphnia magna)		Reproduction

epoxy resin (number average molecular weight ≤ 700)

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOEC	OECD 211	0.3 mg/l	21 day	Daphnia		Reproduction

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOEC	OECD 211	0.3 mg/l	21 day	Daphnia		

12.2. Persistence and degradability

Biodegradability

2,4,6-tris(dimethylaminomethyl) phenol

Parameter	Method	Value	Time of exposure	Environment	Result	Source
	OECD 301D	4 %	28 day		Hardly biodegradable	

benzyl alcohol

Parameter	Method	Value	Time of exposure	Environment	Result	Source
	OECD 301A	95-97 %	21 day			
					Easily biodegradable	

epoxy resin (number average molecular weight ≤ 700)

Parameter	Method	Value	Time of exposure	Environment	Result	Source
	OECD 301F	5 %	28 day			
	OECD 301A	95-97 %	21 day		Hardly biodegradable	
			4,83 day	Freshwater	Hardly biodegradable	

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Parameter	Method	Value	Time of exposure	Environment	Result	Source
		0 %	28 day		Hardly biodegradable	EU

Data not available.

12.3. Bioaccumulative potential

2,4,6-tris(dimethylaminomethyl) phenol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
Log Pow	0.219					Low

benzyl alcohol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
Log Pow	1.1					low
BCF	1					low

epoxy resin (number average molecular weight ≤ 700)

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
Log Pow	3.242					Low
BCF	31					Low

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
Log Pow	2.7-3.6					Low

Not available.

12.4. Mobility in soil

Not available.

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. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

No

14.6. Special precautions for user

Reference in the Sections 4 to 8.

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

not available

SECTION 15: Regulatory information

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

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 of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. The Act No. 258/2000 Coll., on Protection of Public Health as amended. Decree No. 361/2007 Coll., determining conditions of occupational health protection as amended. Decree No. 415/2012 Coll., on the permissible level of pollution and its determination and implementation of certain other provisions of the Air Protection Act as amended. The Act No. 185/2001 Coll., on Waste and the Amendment of Some Other Acts as amended. The Act No. 201/2012 Coll., on the Protection of Atmosphere – Clean Air Act as amended. Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
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

P280	Wear protective gloves/eye protection/face protection.
P273	Avoid release to the environment.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container to in accordance with national regulations.

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

EUH 205	Contains epoxy constituents. May produce an allergic reaction.

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
DNEL	Derived no-effect level
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
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
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
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
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
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization

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. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations 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)

2, 3, 8, 9, 11, 12, 15, 16

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.