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

1.1. Product identifier

Kalteinbettmittel Epoclear 2000 (Harz)

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

Use of the substance/mixture

epoxy binder

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Schmitz-Metallographie GmbH	
Street:	Kaiserstraße 100	
Place:	D-52134 Herzogenrath	
Telephone:	02407 / 568296-0	Telefax: 02407 / 568296-9
e-mail:	info@schmitz-metallographie.de	
Contact person:	Herr Füllmann	
e-mail:	info@schmitz-metallographie.de	
Internet:	www.schmitz-metallographie.de	
Responsible Department:	Dr. Gans-Eichler Chemieberatung GmbH Otto-Hahn-Str. 36 D-48161 Münster	e-mail: info@tge-consult.de Tel.: +49(0)2534 6441185 www.tge-consult.de

1.4. Emergency telephone number:

02407 / 568296-0 (Mo-Fr 9:00 - 16:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

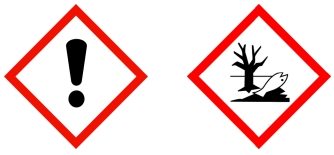
Regulation (EC) No. 1272/2008

Hazard components for labelling

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
1,6-bis(2,3-epoxypropoxy)hexane

Signal word: Warning

Pictograms:



Hazard statements

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

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Epoxy resin formulation based on bisphenol A liquid resin and bisphenol F liquid resin

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			50-100 %
	500-033-5	603-074-00-8	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol			10-25 %
	500-006-8		01-2119454392-40	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane			10-25 %
	240-260-4		01-2119463471-41	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H319 H317 H412			

Full text of H and EUH statements: see section 16.

Specific concentration limits and M-factors

CAS No	EC No	Chemical name	Quantity
	Specific concentration limits and M-factors		
25068-38-6	500-033-5	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)	50-100 %
	Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100		

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Sand. Foam. Carbon dioxide (CO2). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2)

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Eliminate leaks immediately. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil. If required, notify relevant authorities according to all applicable regulations.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Recommended storage temperature: 20°C
Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			
Worker DNEL, acute		dermal	systemic	8,33 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	8,33 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	12,25 mg/m³
Worker DNEL, long-term		inhalation	systemic	12,25 mg/m³
Consumer DNEL, long-term		dermal	systemic	3,571 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	3,571 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,75 mg/m³
Consumer DNEL, acute		inhalation	systemic	0,75 mg/m³

9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol		
Worker DNEL, long-term	inhalation	systemic	29,39 mg/m³
Worker DNEL, long-term	dermal	systemic	104,15 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	8,7 mg/m³
Consumer DNEL, long-term	dermal	systemic	62,5 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)
Freshwater	0,006 mg/l
Freshwater (intermittent releases)	0,018 mg/l
Marine water	0,0006 mg/l
Freshwater sediment	0,996 mg/kg
Marine sediment	0,0996 mg/kg
Secondary poisoning	11 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,196 mg/kg
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
Freshwater	0,003 mg/l
Freshwater (intermittent releases)	0,025 mg/l
Marine water	0 mg/l
Freshwater sediment	0,294 mg/kg
Marine sediment	0,029 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,237 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls




Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.
Provide adequate ventilation.

Protective and hygiene measures

When using do not eat, drink or smoke.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

Hand protection

In case of prolonged or frequently repeated skin contact:
Wear suitable gloves.
Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm
Breakthrough time >= 8 h
Butyl rubber. - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm
Breakthrough time >= 8 h
PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.
Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
-Exceeding exposure limit values
-Insufficient ventilation. and aerosol or mist formation
Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellowish
Odour:	characteristic
pH-Value:	No information available.

Changes in the physical state

Melting point:	No information available.
Initial boiling point and boiling range:	> 200 °C
Sublimation point:	No information available.
Softening point:	No information available.
Pour point:	No information available.
Flash point:	> 150 °C
Sustaining combustion:	No data available

Flammability

Solid:	No information available.
Gas:	No information available.

Explosive properties

none

Lower explosion limits:	No information available.

Upper explosion limits:	No information available.
Ignition temperature:	No information available.
Auto-ignition temperature	
Solid:	No information available.
Gas:	No information available.
Decomposition temperature:	No information available.
Oxidizing properties	
none	
Vapour pressure: (at 20 °C)	No information available.
Vapour pressure: (at 50 °C)	No information available.
Density (at 20 °C):	1,14 g/cm³
Bulk density:	No information available.
Water solubility:	No information available.
Solubility in other solvents	
No information available.	
Partition coefficient:	No information available.
Viscosity / dynamic: (at 23 °C)	800 mPa·s
Viscosity / kinematic:	No information available.
Flow time:	No information available.
Vapour density:	No information available.
Evaporation rate:	No information available.
Solvent separation test:	No information available.
Solvent content:	No information available.

9.2. Other information

Solid content:	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)				
	oral	LD50 >2000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >2000 mg/kg	Rabbit.	ECHA Dossier	
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol				
	oral	LD50 > 5000 mg/kg	Rat	ECHA Dossier	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	ECHA Dossier	OECD Guideline 402
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane				
	oral	LD50 3010 mg/kg	Rat.	ECHA Dossier	
	dermal	LD50 2000 mg/kg	Rat.	ECHA Dossier	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin); Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; 1,6-bis(2,3-epoxypropoxy)hexane)

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin): In-vitro mutagenicity: Method: OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay): negative.; bacterial reverse mutation assay (e.g. Ames test): positive.; Literature information: ECHA Dossier; In-vivo mutagenicity: Method: - ; Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies); Species: Rat female. ; Exposure duration: 2 years; Result: NOAEL = 15 mg/kg (reduced body weight), NOAEL = 100 mg/kg (Toxicity); Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study); Species: Rat; Result: NOEL = 750 mg/kg; Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Result: NOAEL = 180 mg/kg; Literature information: ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin) Subchronic oral toxicity: Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents); Species: Rat ;Exposure duration: 90d; Result: NOAEL = 50 mg/kg; Literature information: ECHA Dossier

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)						
	Acute fish toxicity	LC50	1,2 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	
	Acute algae toxicity	ErC50	9,4 mg/l	72 h	Scenedesmus capricornutum	ECHA Dossier	
	Acute crustacea toxicity	EC50	1,7 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Crustacea toxicity	NOEC	0,3 mg/l	21 d	Daphnia magna	ECHA Dossier	
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol						
	Acute fish toxicity	LC50	5,7 mg/l	96 h	Leuciscus idus	ECHA Dossier	WoE
	Acute algae toxicity	ErC50	> 1,8 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	3,5 mg/l	48 h	Daphnia magna	ECHA Dossier	WoE
	Crustacea toxicity	NOEC	0,3 mg/l	21 d	Daphnia magna	ECHA Dossier	OECD Guideline 211
	Acute bacteria toxicity	(IC50 >100 mg/l)		3 h	Activated sludge	ECHA Dossier	
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane						
	Acute fish toxicity	LC50	30 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	
	Acute crustacea toxicity	EC50	47 mg/l	48 h	Daphnia magna	ECHA Dossier	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	5%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol			
	EU Method C.4-E (Closed Bottle Test)	0%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane			
	OECD 301D/ EEC 92/69/V, C.4-E	47%	28	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)	3,26
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	2,7
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane	0,822 (pH 6-8)

BCF

CAS No	Chemical name	BCF	Species	Source

9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	150		ECHA Dossier

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

080199 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; wastes not otherwise specified

List of Wastes Code - used product

080199 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; wastes not otherwise specified

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin))

14.3. Transport hazard class(es): 9

14.4. Packing group: III

Hazard label: 9

Classification code: M6

Special Provisions: 274 335 375 601

Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Inland waterways transport (ADN)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin))
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin))
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Marine pollutant:	YES
Special Provisions:	274, 335, 969
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin))
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Special Provisions:	A97 A158 A197
Limited quantity Passenger:	30 kg G

Passenger LQ:	Y964
Excepted quantity:	E1
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)

14.6. Special precautions for user

Safe handling: see section 7

Personal protection equipment: see section 8

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

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU (SEVESO III):	E2 Hazardous to the Aquatic Environment

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

SECTION 16: Other information

Changes

Rev. 1.0; Initial release: 14.12.2018
Rev. 2.0; 04.01.2021 Changes in chapter: 12, 16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures
DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European LIst of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our

present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)