

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product name

EPOKOL MIX5

Product code

[Arhiviran: 21.12.2020]



chemius.net/e3O8c

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Relevant identified uses

Two-component epoxy adhesive

Uses advised against

No information.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier

MITOL, tovarna lepil, d.o.o., Sežana

Address: Partizanska c. 78 Sežana, Slovenia

Phone: +386 5 73 12 300

Fax: +386 5 73 12 390

E-mail: lilijana.kocjan@mitol.si

Point of contact for safety info: Lilijana Kocjan Žorž

1.4. EMERGENCY TELEPHONE NUMBER

112

+386 5 73 12 300 (8:00-16:00)

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin Irrit. 2; H315 Causes skin irritation.

Skin Sens. 1; H317 May cause an allergic skin reaction.

Eye Dam. 1; H318 Causes serious eye damage.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

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2.2 LABEL ELEMENTS

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]



Signal word: **Danger**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

P102 Keep out of reach of children.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

2.2.2. Contains:

reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700)

epichlorohydrin-formaldehyde-phenol polymer number average molecular weight ≤ 700

Bis[(dimethylamino) methyl]phenol

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. OTHER HAZARDS

Persons who have problems with sensitivity of the airways (asthma, chronic bronchitis), should avoid contact with the product.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

For mixtures see 3.2.

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3.2. MIXTURES

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	25068-38-6 500-033-5 603-074-00-8	50-100	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	Skin Irrit. 2; H315: C \geq 5 % Eye Irrit. 2; H319: C \geq 5 %	01-2119456619-26
epichlorohydrin-formaldehyde-phenol polymer number average molecular weight \leq 700	9003-36-5 - -	30-50	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411		01-2119454392-40
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2 202-013-9 603-069-00-0	<5	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319		-
Bis[(dimethylamino) methyl]phenol	71074-89-0 275-162-0 -	<5	Acute Tox. 4; H302 + H312 Skin Corr. 1B; H314 Eye Dam. 1; H318		-

SECTION 4. FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Following inhalation

Remove patient to fresh air - move out of dangerous area. If victim is not breathing give artificial respiration. If symptoms occur, seek medical advice.

Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. Do not use solvents or thinners. If symptoms occur seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If the patient is wearing contact lenses, remove them immediately. Protect unharmed eye. If irritation does not stop, seek professional medical treatment!

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Maintain an open airway. Consult a physician. Show the physician the safety data sheet or label.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

Skin contact

Itching, redness, pain.

May cause sensitisation by skin contact (symptoms: itching, redness, rashes).

Eye contact

Redness, tearing, pain.

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Ingestion

Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

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SECTION 5. FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products

In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂). In the event of fire the following is released: nitrogen oxides (NO_x).

5.3. ADVICE FOR FIREFIGHTERS

Protective actions

In case of fire do not breathe fumes/gases.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system. Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Prevent access to unprotected personnel. Evacuate personnel.

6.1.2. For emergency responders

No action shall be taken involving any personal risk or without suitable training.

6.2. ENVIRONMENTAL PRECAUTIONS

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

6.3.1. For containment

Dam the spillage.

6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

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6.3.3. Other information

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6.4. REFERENCE TO OTHER SECTIONS

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation. Prevent contact of the substance with open flame, sparks or hot surfaces.

Measures to prevent aerosol and dust generation

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Measures to protect the environment

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7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist. Refer to instructions on label and regulations for safety and health at work. People with sensitive skin should not come into contact with the product.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

7.2.1. Technical measures and storage conditions

Keep in cool and well ventilated area. Keep away from food, drink and animal feeding stuffs. Keep away from oxidizers, strong alkalies and acids. Keep away from amines. Keep container closed. Keep in properly labelled containers. Store at room temperature.

7.2.2. Packaging materials

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7.2.3. Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking.

7.2.4. Storage class

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7.2.5. Further information on storage conditions

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7.3. SPECIFIC END USE(S)

Recommendations

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Industrial sector specific solutions

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

8.1.1. Occupational exposure limit values

No information.

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8.1.2. Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

8.1.3. DNEL/DMEL values

For components

Name	Type	Exposure route	Exposure frequency	Value	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Worker	dermal	short term (systemic effects)	8,3 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Worker	inhalation	short term (systemic effects)	12,3 mg/m ³	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Worker	dermal	long term (systemic effects)	8,3 mg/kg	repeated
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Worker	inhalation	long term (systemic effects)	12,3 mg/m ³	repeated
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	dermal	short term (systemic effects)	3,6 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	inhalation	short term (systemic effects)	0,75 mg/m ³	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	oral	short term (systemic effects)	0,75 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	dermal	long term (systemic effects)	3,6 mg/kg	repeated
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	inhalation	long term (systemic effects)	0,75 mg/m ³	repeated
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Consumer	oral	long term (systemic effects)	0,75 mg/kg	repeated

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8.1.4. PNEC values

For components

Name	Exposure route	Value	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	fresh water	0,006 mg/L	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	marine water	0,0006 mg/L	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	fresh water sediment	0,0005 mg/L	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	marine water sediment	0,00627 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	water treatment plant	10 mg/L	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	soil	0,0478 mg/kg	

8.2. EXPOSURE CONTROLS

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with eyes and skin. Do not breathe vapours/aerosols. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166). Do not use contact lenses.

Hand protection

Protective gloves (EN 374). «CE» marking, category III.

Appropriate materials

Material	Thickness	Penetration Time	Remark
Nitrile			

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2011).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

Thermal hazards

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8.2.3. Environmental exposure controls

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

-	Physical state:	liquid
-	Colour:	slight yellow tint
-	Odour:	characteristic

Important health, safety and environmental information

-	pH	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	> 200 °C
-	Flash point	150 °C
-	Evaporation rate	No information.
-	Flammability (solid, gas)	No information.
-	Explosion limits (vol%)	No information.
-	Vapour pressure	No information.
-	Vapour density	No information.
-	Density	Density: 1,15 g/cm ³ at 25 °C (IKM 4/24)
-	Solubility	No information.
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	Dynamic: 6000 – 8000 mPas at 25 °C (A) 10000 – 18000 mPas at 25 °C (B)
-	Explosive properties	No information.
-	Oxidising properties	No information.
-	Particle characteristics	No information.

9.2. OTHER INFORMATION

-	Remarks:	
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SECTION 10. STABILITY AND REACTIVITY

10.1. REACTIVITY

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10.2. CHEMICAL STABILITY

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

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10.4. CONDITIONS TO AVOID

No special precautions required. Consider the directions for use and storage.

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10.5. INCOMPATIBLE MATERIALS

Oxidants. Bases.
Amines.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

(a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	oral	LD ₅₀	rat (female)		> 2000 mg/kg	OECD 420	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	dermal	LD ₅₀	rat		> 2000 mg/kg	OECD 402	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	dermal	LD ₅₀	rat		1280 mg/kg		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	oral	LD ₅₀	rat		1200 mg/kg		

(b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	rabbit		Irritating.	OECD 404	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			Contact with skin causes irritation.		

Additional information: Causes skin and eye irritation.

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			Contact with eyes causes irritation.		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			Danger of serious eye injury.		

(d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	dermal	mouse		Sensitizing.	OECD 429	

Additional information: May cause an allergic skin reaction.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

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Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

Name	Exposure route	Type	Species	Time	Organ	Value	Result	Method	Remark
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	inhalation						Irritates respiratory system.		

(i) STOT-repeated exposure

No information.

(j) Aspiration hazard

No information.

11.2. INFORMATION ON OTHER HAZARDS

11.2.1. Endocrine disrupting properties

No information.

11.2.2. Other information

No information.

SECTION 12. ECOLOGICAL INFORMATION

12.1. TOXICITY

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	EC ₅₀	1,7 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	LC ₅₀	180 mg/L	96 h	fish			
	EC ₅₀	250 mg/L	48 h	crustacea			

12.1.2. Chronic (long-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700) (25068-38-6)	NOEC	0,3 mg/l	21 days	aquatic invertebrate	<i>Daphnia magna</i>	OECD 211	

12.2. PERSISTENCE AND DEGRADABILITY

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

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12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Type	Rate	Time	Evaluation	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	aerobic		28 days	not readily biodegradable	OECD 301 F	

12.3. BIOACCUMULATIVE POTENTIAL

12.3.1. Partition coefficient

For components

Substance (CAS Nr.)	Media	Value	Temperature	pH	Concentration	Method
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Octanol-water (log Pow)	3,242		7,1		OECD 117

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. MOBILITY IN SOIL

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

The product does not contain any PBT or vPvB substances in percentages greater than 0.1%.

12.6. ENDOCRINE DISRUPTING PROPERTIES

No information.

12.7. ADDITIONAL INFORMATION

For product

Do not allow to reach ground water, water courses or sewage system.

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

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

13.1.1. Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Do not allow product to reach drains/sewage systems.

Packaging

Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Dispose of completely emptied packaging to the authorized waste collector or hand over to collection centers of waste management companies under the classification numbers for waste packaging.

13.1.2. Waste treatment-relevant information

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13.1.3. Sewage disposal-relevant information

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13.1.4. Other disposal recommendations

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SECTION 14. TRANSPORT INFORMATION

14.1. UN NUMBER OR ID NUMBER

UN 3082

14.2. UN PROPER SHIPPING NAME

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-epichlorhydrin), epoxy resin (number average molecular weight ≤ 700)

14.3. TRANSPORT HAZARD CLASS(ES)

9

14.4. PACKING GROUP

III

14.5. ENVIRONMENTAL HAZARDS

Additional labeling: ENVIRONMENTALLY HAZARDOUS

IMDG: MARINE POLLUTANT

14.6. SPECIAL PRECAUTIONS FOR USER

Limited quantities

5 L

Tunnel restriction code

(-)

IMDG flashpoint

150 °C, c.c.

IMDG EmS

F-A, S-F



14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS

Goods may not be carried in bulk in bulk containers, containers or vehicles.

SECTION 15. REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.2. CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

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SECTION 16. OTHER INFORMATION

Indication of changes

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Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC₅₀ - Lethal Concentration to 50 % of a test population
LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment

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(Q)SAR - Qualitative Structure Activity Relationship

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RIP - REACH Implementation Project

RMM - Risk Management Measure

SCBA - Self-Contained Breathing Apparatus

SDS - Safety data sheet

SIEF - Substance Information Exchange Forum

SME - Small and Medium sized Enterprises

STOT - Specific Target Organ Toxicity

(STOT) RE - Repeated Exposure

(STOT) SE - Single Exposure

SVHC - Substances of Very High Concern

UN - United Nations

vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

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List of relevant H phrases

H302 Harmful if swallowed.

H302 + H312 Harmful if swallowed or in contact with skin.

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.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.