Product name: **Epoxy basis -2** Creation date: **1.7.2014** Revision: **4.3.2015** Version: **1**

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

1.1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product name

Epoxy basis -2

1.2. USE OF THE SUBSTANCE/PREPARATION

<u>Use</u>

Epoxy resin

Uses advised against

No information

1.3. COMPANY/UNDERTAKING IDENTIFICATION

Supplier

SANIKOM D.O.O. Address: Vrtna ulica 39, 4294 Križe, Slovenia Tel.: 051-354-081 Fax: 0599-50-636 e-mail: gregor.janc@sanikom.si Point of contact for safety info: Gregor Janc

1.4. EMERGENCY TELEPHONE

Emergency

112

<u>Supplier</u>

051-354-081

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of substance/preparation

Classification according to Reg. 1272/2008

Skin Irrit. 2; H315 Causes skin irritation.Skin Sens. 1; H317 May cause an allergic skin reaction.Eye Irrit. 2; H319 Causes serious eye irritation.Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

Classification according to directive 67/548/EEC or. 99/45/EC

Xi; R36/38 Irritating to eyes and skin.

Xi; R43 May cause sensitisation by skin contact.

N; R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



chemius.net/YNdd2

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2.2 Label elements

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



Signal word: Warning

- 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.
- EUH205 Contains epoxy constituents. May produce an allergic reaction.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337 + P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local regulation.

2.2.2. Contains:

reaction product: bisphenol-A-(epichlorhydrin) Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

Chemical name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification according to directive 67/548/EEC or 99/45/EC	REACH reg. number
reaction product: bisphenol-A- (epichlorhydrin)	25068-38-6 500-033-5 603-074-00-8	60-100	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	Xi; R36/38-43 N; R51/53	01-2119456619-26
Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol	9003-36-5 500-006-8 -	15-30	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	Xi; R38-43 N; R51/53	01-2119454392-40
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	68609-97-2 271-846-8 603-103-00-4	5-15			01-2119485289-22

Product name: Epoxy basis -2 Creation date: 1.7.2014 Revision: 4.3.2015 Version: 1

SECTION 4. FIRST AID MEASURES

4.1. First-aid measures

General measures

Never give anything by mouth to an unconscious person.

Skin contact

Take off all contaminated clothing. Wash thoroughly with plenty of water and soap! If symptoms persist seek medical attention.

Eye contact

Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. If irritation does not stop, seek professional medical treatment!

Inhalation

Remove patient to fresh air-move out of dangerous area. If symptoms occur it is necessary to search for medical help.

Ingestion

Do not induce vomiting. Rinse mouth with water. Consult a physician. Show the physician the Safety Data Sheet or label.

4.2. Symptoms

Skin contact

Irritating to the skin. May cause sensitisation by skin contact.

Eye contact

Redness, tearing, pain.

Inhalation

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

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Alcohol or polymer foam.

Unsuitable extinguishing media

Full water jet.

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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of heating harmful vapours/gases can be generated.

5.3. Advice for firefighters

Protective actions

Special protective equipment for fire-fighters

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

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.

- 6.1.2. For emergency responders
- 6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it according to valid regulations on handling with waste.

- 6.3.3. Other information
- 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.

Measures to prevent aerosol and dust generation

- Measures to protect the environment
- 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.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Keep in cool and good ventilated area. Keep away from food, drink and animal feedingstuffs

7.2.2. Packaging materials

- 7.2.3. Requirements for storage rooms and vessels
- 7.2.4. Storage class

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7.2.5. Further information on storage conditions

7.3. Specific end use(s)

Recommendations

Industrial sector specific solutions

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational Exposure limit values

No information

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.

8.1.3. DNEL values

For components

Chemical name	Туре	exp. route	exp. frequency	value	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Worker	dermal	short term (systemic effects)	8,3 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Worker	inhalation	short term (systemic effects)	12,3 mg/m ³	
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Worker	dermal	long term (systemic effects)	8,3 mg/kg	repeated
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Worker	inhalation	long term (systemic effects)	12,3 mg/m³	repeated
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	dermal	short term (systemic effects)	3,6 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	inhalation	short term (systemic effects)	0,75 mg/m³	
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	oral	short term (systemic effects)	0,75 mg/kg	
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	dermal	long term (systemic effects)	3,6 mg/kg	repeated
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	inhalation	long term (systemic effects)	0,75 mg/m³	repeated
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	Consumer	oral	long term (systemic effects)	0,75 mg/kg	repeated
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	inhalation	short term (systemic effects)	29 mg/m ³	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	dermal	short term (systemic effects)	17 mg/kg	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	dermal	short term (local effects)	68 mg/cm2	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	inhalation	short term (local effects)	9,8 mg/m ³	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	dermal	long term (systemic effects)	3,9 mg/kg	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	inhalation	long term (systemic effects)	13,8 mg/m³	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	dermal	long term (local effects)	1,7 mg/cm2	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Worker	inhalation	long term (local effects)	0,98 mg/m³	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	dermal	short term (systemic effects)	10 mg/kg	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	inhalation	short term (systemic effects)	7,6 mg/m ³	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	oral	short term (systemic effects)	1219 mg/kg	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	dermal	short term (local effects)	40 mg/cm2	

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	inhalation	short term (local effects)	2,9 mg/m ³
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	dermal	long term (systemic effects)	2,35 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	inhalation	long term (systemic effects)	4,1 mg/m ³
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	oral	long term (systemic effects)	1 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	dermal	long term (local effects)	1 mg/cm2
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609- 97-2)	Consumer	inhalation	long term (systemic effects)	1,46 mg/m ³

8.1.4. PNEC values

For components

Chemical name	exp. route	value	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	fresh water	0,003 mg/l	
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	marine water	0,0003 mg/l	
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	fresh water sediment	0,0005 mg/l	

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.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in the area with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection. (EN 166)

Hand protection

Protective gloves (EN 374).

Appropriate materials

Material	Thickness	Penetration Time	Remark
Butyl	mm	480 min	

Skin protection

Cotton protective clothing (EN ISO 13688) and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

In case of insufficient ventilation wear mask with filter A (EN 14387)

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Thermal hazards

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8.2.3. Environmental exposure controls

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

-	Physical state:	liquid
-	Colour:	colourless
-	Odour:	mild

Important health, safety and environmental information

-	рН	No information
-	Melting point	No information
-	Boiling point/boiling range	> 200 °C
-	Flashpoint	130 °C (EN 22719)
-	Evaporation rate	No information
-	Ignition temperature	No information
-	Explosion limits (vol%)	No information
-	Vapour pressure	No information
-	Vapour density	No information
-	Density	No information
-	Solubility	Water: Insoluble
-	Partition coefficient n-octanol/water (log Kow)	No information
-	Auto-ignition temperature	No information
-	Decomposition temperature	No information
-	Viscosity	dynamic : 800 – 1100 mPas at 25 °C
-	Explosive properties	No information
-	Oxidising properties	No information

9.2. Other information

- Remarks:

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

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Product name: **Epoxy basis -2** Creation date: **1.7.2014** Revision: **4.3.2015** Version: **1**

10.2. Chemical stability

Product is stable under normal conditions according to handling and storage.

- 10.3. Possibility of hazardous reactions
- 10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products expected. In case of fire/explosion vapours dangerous for health are spread.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Acute toxicity

For components

Chemical name	exp. route	Туре	species	Time	value	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	oral	LD ₅₀	rat		> 2000 mg/kg		
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	dermal	LD ₅₀	rat		> 2000 mg/kg		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol (9003-36-5)	dermal	LD ₅₀	rat		> 2000 mg/kg		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol (9003-36-5)	oral	LD ₅₀	rat		> 2000 mg/kg		
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)	oral	LC ₅₀	rat		30,1 mg/kg		
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)	inhalation	LC0	rat	7 h	> 0,15 mg/l		

11.1.2. Skin corrosion/irritation, serious eye damage/irritation, aspiration hazard

No information

11.1.3. Respiratory or skin sensitisation

No information

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11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity

Carcinogenicity No information

(Germ cell) mutagenicity

No information

Reproductive toxicity

No information

Summary of evaluation of the CMR properties

No information

11.1.5. STOT-single and repeated exposure

No information

SECTION 12. ECOLOGICAL INFORMATION

Product name: **Epoxy basis -2** Creation date: **1.7.2014** Revision: **4.3.2015** Version: **1**

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	EC ₅₀	9,4 mg/L	72 h	algae			
	EC ₅₀	1,7 mg/L	48 h	crustaceans	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)	
	LC ₅₀	1,5 mg/L	96 h	fish		OECD Guideline 203 (Fish, Acute Toxicity Test)	
	IC ₅₀	100 mg/L	3 h	bacteria			
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	EC50	1,8 mg/L	72 h	algae		OECD 201	
(9003-36-5)	EC ₅₀	1,6 mg/L	48 h	crustaceans	Daphnia magna	OECD 202	
	IC ₅₀	> 100 mg/L	3 h	bacteria			
	LC50	0,55 mg/L	96 h	fish		OECD 203	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)	EL ₅₀	7,2 mg/L	48 h	invertebrates	Daphnia magna	OECD 202	
(66609-97-2)	IC ₅₀	843,75 mg/L	72 h	algae		OECD 201	
	IC ₅₀	> 100 mg/L	3 h	bacteria		OECD 209	
	LC50	5000 mg/L	96 h	fish		OECD 203	

12.1.2. Chronic (long-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068-38- 6)	NOEC	0,3 mg/l	21 days	aquatic invertebrate	Daphnia magna	OECD 211	
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol (9003-36-5)	NOEC	0,3 mg/l	21 days	cartilaginous fish	Daphnia magna	OECD 211	

12.2. Persistence and degradability

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

No information

12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Organism	Rate	Time	Evaluation	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068- 38-6)	aerobic	43 %	28 days	readily biodegradable	OECD 301 F	

12.3. Bioaccumulative potential

12.3.1. Partition coefficient n-octanol/water (log Kow)

For components

Substance (CAS Nr.)	Media	value	Temperature	pН	Concentration	Method
reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6)	Octanol-water (log Pow)	3,242				

12.3.2. Bioconcentration factor (BCF)

For components

Substance (CAS Nr.)	species	organism	value	Duration	Evaluation	Method	Remark
reaction product: bisphenol-A-(epichlorhydrin) (25068-38- 6)	BCF		31		Low		

12.4. Mobility

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

No evaluation.

12.6. Other adverse effects

No information

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: to leave it to authorized collector/remover/transformer of hazardous waste.

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- Waste codes / waste designations according to LoW

07 02 08* - other still bottoms and reaction residues

Packaging

Completely emptied container dispose according to regulations.

13.1.2. Waste treatment-relevant information

-

-

13.1.3. Sewage disposal-relevant information

13.1.4. Other disposal recommendations

SECTION 14. TRANSPORT INFORMATION

- 14.1. UN number 3082
- 14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- 14.3. Transport hazard class(es)

9

14.4. Packing group

111

14.5. Environmental hazards Additional labeling: Dangerous for the environment

IMDG: MARINE POLLUTANT

14.6. Special precautions for user

Limited quantities 5 L

Tunnel restriction code

IMDG EmS F-A, S-F



14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- Dangerous preparations directive (99/45/EC) as amended
- Dangerous substances directive (67/548/EEC) as amended

<u>15.1.1. Information according 1999/13/EC about limitation of emissions of volatile organic compounds</u> (VOC-guideline)

not applicable

15.2. Chemical Safety Assessment

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

SECTION 16. OTHER INFORMATION

Indication of changes

Key literature references and sources for data

List of relevant R phrases

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of relevant H phrases

- 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.

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.

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