

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

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

### 1.1. Product identifier

Product name

**EX9-15-A (epoxy)**



chemius.net/6h062

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

Use

Epoxy resin

Uses advised against

No information

### 1.3. Details of the supplier of the safety data sheet

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 number

Emergency

112

Supplier

051-354-081

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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.

# SAFETY DATA SHEET according to Regulation 1907/2006

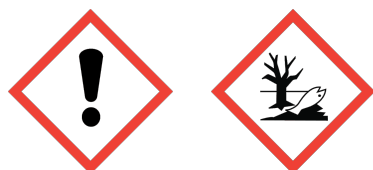
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Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 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.

P261 Avoid breathing mist/vapours.

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

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

P362 + P364 Take off contaminated clothing and wash it before reuse.

### 2.2.2. Contains:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (CAS: 9003-36-5, EC: 500-006-8)

Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight  $\leq$  700) (CAS: 25068-38-6, EC: 500-033-5, Index: 603-074-00-8)

### 2.2.3. Special provisions

EUH205: Contains epoxy constituents. May produce an allergic reaction.

## 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]	REACH reg. number
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5 500-006-8 -	60- $\leq$ 100	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	01-2119454392-40
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq$ 700)	25068-38-6 500-033-5 603-074-00-8	13- $\leq$ 30	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	01-2119456619-26

## SECTION 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General measures

Never give anything by mouth to an unconscious person. Place patient stably in side position for transportation. When in doubt or if symptoms do not disappear seek medical help. Show to physician Safety data sheet and label.

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## Inhalation

Remove patient to fresh air-move out of dangerous area. Victim should rest in a warm place. If symptoms persist seek medical attention.

## Skin contact

Immediately remove contaminated clothing. Wash thoroughly with plenty of water and soap! If feeling unwell seek medical help. Wash contaminated clothes and shoes before reuse.

## Eye contact

Immediately flush eyes with running water, keeping eyelids open. Remove contact lenses. Seek medical help.

## Ingestion

Rinse mouth with water. Do not induce vomiting. 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 vapour may cause respiratory irritation. Coughing, sneezing, nasal discharge, labored breathing.

#### Skin contact

Irritating to the skin (itching, redness, pain). May cause sensitisation by skin contact (itching, redness, rashes).

#### Eye contact

Redness, tearing, pain.

#### Ingestion

May cause nausea/vomiting and diarrhea.

### **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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

Full water jet. Do not use water jet as an extinguisher, as this will spread the fire.

### **5.2. Special hazards arising from the substance or mixture**

#### Hazardous combustion products

In case of a fire toxic gases can generate; do not inhale gases/smoke.

### **5.3. Advice for firefighters**

#### Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray jet. If possible remove containers from endangered area.

#### 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) .

#### 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.

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 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. Avoid contact with skin and eyes. Do not breathe vapour or mist.

#### 6.1.2. For emergency responders

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### 6.2. Environmental precautions

Do not allow product to reach water or permeable soil. If larger amounts are released call fire brigade or information centre.

### 6.3. Methods and material for containment and cleaning up

#### 6.3.1. For containment

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#### 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

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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.

##### **Measures to prevent aerosol and dust generation**

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##### **Measures to protect the environment**

Avoid release to 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. Consider measures required in point 8. in this Data Sheet.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1. Technical measures and storage conditions

Keep in tightly closed container. Keep in cool and well ventilated area. Keep away from food, drink and animal feedingstuffs. Store away from strong acids. Store away from strong bases. Keep away from strong oxidizing agents.

#### 7.2.2. Packaging materials

The original container of producer.

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 7.2.3. Requirements for storage rooms and vessels

Close open containers after use. Put the container 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

#### 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**

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

Chemical name	Type	exp. route	exp. frequency	value	Remark
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Worker	dermal	short term (systemic effects)	8,3 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Worker	inhalation	short term (systemic effects)	12,3 mg/m <sup>3</sup>	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (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 $\leq 700$ ) (25068-38-6)	Worker	inhalation	long term (systemic effects)	12,3 mg/m <sup>3</sup>	repeated
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Consumer	dermal	short term (systemic effects)	3,6 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Consumer	inhalation	short term (systemic effects)	0,75 mg/m <sup>3</sup>	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Consumer	oral	short term (systemic effects)	0,75 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (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 $\leq 700$ ) (25068-38-6)	Consumer	inhalation	long term (systemic effects)	0,75 mg/m <sup>3</sup>	repeated
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	Consumer	oral	long term (systemic effects)	0,75 mg/kg	repeated

## 8.1.4. PNEC values

### For components

Chemical name	exp. route	value	Remark
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	fresh water	0,003 mg/l	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	marine water	0,0003 mg/l	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (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. Avoid contact with eyes and skin. Do not breathe vapours/aerosols. Do not eat, drink or smoke while working.

#### 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).

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## Hand protection

Protective gloves (EN 374). The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Follow the manufacturer's instructions about permeability and penetration times and specific workplace conditions (mechanic load, exposure duration).

## Appropriate materials

Material	Thickness	Penetration Time	Remark
Butyl		> 8 h	EN 374
Nitrile		≤ 480 min	EN 374
Neoprene		≤ 480 min	EN 374

## Skin protection

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

## Respiratory protection

Not needed under normal use and adequate ventilation. 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

-	<b>Physical state:</b>	liquid; clear
-	<b>Colour:</b>	bright yellow
-	<b>Odour:</b>	slight

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## Important health, safety and environmental information

-	<b>pH</b>	No information
-	<b>Melting point</b>	No information
-	<b>Boiling point/boiling range</b>	> 200 °C
-	<b>Flashpoint</b>	> 200 °C (Closed cup [Pensky-Martens])
-	<b>Evaporation rate</b>	No information
-	<b>Ignition temperature</b>	No information
-	<b>Explosion limits (vol%)</b>	No information
-	<b>Vapour pressure</b>	< 1,0E-5 hPa at 20 °C
-	<b>Vapour density</b>	No information
-	<b>Density</b>	<b>Density:</b> 1,18 g/cm <sup>3</sup> at 25 °C <b>Relative density:</b> ca. 1,2 at 25 °C
-	<b>Solubility</b>	<b>Water:</b> Insoluble
-	<b>Partition coefficient</b>	No information
-	<b>Auto-ignition temperature</b>	No information
-	<b>Decomposition temperature</b>	> 200 °C
-	<b>Viscosity</b>	<b>dynamic:</b> 6500 – 8000 mPas at 25 °C
-	<b>Explosive properties</b>	No information
-	<b>Oxidising properties</b>	No information

## 9.2. Other information

-	<b>Remarks:</b>	
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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 according to handling and storage.

### 10.3. Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

### 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. Carbon dioxide; carbon monoxide. Toxic gases and vapors.



# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### 11.1.1. Acute toxicity

##### For components

Chemical name	exp. route	Type	species	Time	value	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	dermal	LD <sub>50</sub>	rat		> 2000 mg/kg	OECD 402	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	oral	LD <sub>50</sub>	rat		> 5000 mg/kg	OECD 401	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	oral	LD <sub>50</sub>	rat		> 2000 mg/kg	OECD 420	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	dermal	LD <sub>50</sub>	rat		> 2000 mg/kg	OECD 402	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	inhalation (vapours)	LC0	rat (male)	4 h	10 ppt		

#### 11.1.2. Skin corrosion/irritation, serious eye damage/irritation

##### For components

Chemical name	exp. route	species	Time	result	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	dermal	rabbit		Mild irritating.	OECD 404	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	eyes	rabbit		No irritant effect.	OECD 405	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	dermal	rabbit		Irritating.	OECD 404	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	eyes	rabbit		Irritating.	OECD 405	

##### Additional information

Causes skin irritation. Causes serious eye irritation.

#### 11.1.3. Respiratory or skin sensitisation

##### For components

Chemical name	exp. route	species	Time	result	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	dermal	mouse		Sensitizing.	OECD 429	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	dermal	mouse		Sensitizing.	OECD 429	

##### Additional information

May cause sensitization by skin contact.

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity

### Carcinogenicity

#### - For components

Chemical name	exp. route	Type	species	Time	value	result	Method	Remark
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	oral		rat	2 years	15 mg/kg	negative	OECD 453 Combined Chronic Toxicity/Carcinogenicity Studies	7 days a week
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	dermal	-	mouse (male)	24 months	0,1 mg/kg	negative	OECD 453	3 days per week
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight $\leq 700$ ) (25068-38-6)	dermal		rat	24 months	1 mg/kg	not carcinogenic	OECD 453	5 days per week

### (Germ cell) mutagenicity

#### - For components

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

Chemical name	Type	species	Time	result	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	in-vitro Mutagenicity	Bacteria		Positive with metabolic activation, positive without metabolic activation	OECD 471	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	in-vitro Mutagenicity	Cell: Mammalian-Animal		Positive with metabolic activation, positive without metabolic activation	OECD 473	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	in-vivo Mutagenicity	Cell: Mammalian-Animal		Negative	OECD 474	oral, 2000 mg/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	in-vivo Mutagenicity	Cell: Mammalian-Animal		Negative	OECD 486	oral, 2000 mg/kg
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	in-vitro Mutagenicity	Bacteria		Negative with metabolic activation, negative without metabolic activation	OECD 471	0 - 25 ug/plate
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	in-vitro Mutagenicity			Positive with metabolic activation, positive without metabolic activation	OECD 476	
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	in-vitro Mutagenicity			Positive with metabolic activation, positive without metabolic activation	OECD 471	0 - 5000 ug/plate
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	in-vivo Mutagenicity	Cell: Mammalian-Animal		Negative	OECD 486	oral
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	in-vivo Mutagenicity	Cell: Mammalian-Animal		Negative	OECD 474	oral, 0-5000 mg/kg
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)				Not mutagenic.		

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## Reproductive toxicity

### - For components

Chemical name	Reproductive toxicity type	Type	species	Time	value	result	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	Developmental toxicity	NOAEL	Rabbit (female)		30 mg/kg bw/day	No effect		
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Effects on fertility	NOEL	rat (male/female)		540 mg/kg	No effect	two-generation study; OECD 416	Oral; P; F1; dose > 750 mg/kg
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Developmental toxicity	NOAEL	Rabbit (female)		30 mg/kg bw/day	No effect		dermal
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Developmental toxicity	NOAEL	Rabbit (female)		60 mg/kg bw/day	No effect	OECD 414; oral	dermal
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Developmental toxicity	NOAEL	rat		180 mg/kg bw/day	No effect	OECD 414	oral

## Summary of evaluation of the CMR properties

No information

### 11.1.5. STOT - single and repeated exposure

#### For components

Chemical name	exp. route	Type	species	Time	organ	value	result	Method	Exposure	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	oral	NOAEL	rat	13 weeks		250 mg/kg			Repeated exposure	7 days/week
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	oral	NOAEL	rat (male/female)	14 weeks		50 mg/kg			Repeated exposure	7 days/week
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	dermal	NOEL	rat	13 weeks		10 mg/kg			Repeated exposure	5 days per week
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	dermal	NOAEL	mouse (male)	13 weeks		100 mg/kg			Repeated exposure	3 days per week

### 11.1.6. Aspiration hazard

No information

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	LC <sub>50</sub>	0,55 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	OECD 203	freshwater; semi-static
	EC <sub>50</sub>	1,6 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	Static system, Fresh water
	EC <sub>50</sub>	1,8 mg/L	96 h	algae	<i>Selenastrum capricornutum</i>	OECD 201	Static system, Fresh water
	IC <sub>50</sub>	> 100 mg/L	3 h	bacteria			Static system, Fresh water
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	EC <sub>50</sub>	9,4 mg/L	96 h	algae	<i>Selenastrum capricornutum</i>	OECD 201	Static system, Fresh water
	EC <sub>50</sub>	1,7 – 2,7 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	Static system, Fresh water
	LC <sub>50</sub>	1,5 mg/L	96 h	fish		OECD Guideline 203 (Fish, Acute Toxicity Test)	
	IC <sub>50</sub>	100 mg/L	3 h	bacteria	Activated sludge		Static system, Fresh water
	LC <sub>50</sub>	1,2 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>		freshwater; semi-static

#### 12.1.2. Chronic (long-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	NOEC	0,3 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	semi-static, fresh water
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	NOEC	0,3 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	semi-static, fresh water

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	aerobic	ca. 0 %	28 days	not readily biodegradable	67/548/EEC Annex V, C.4.E	3 mg/L
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	aerobic	5 %	28 days	not readily biodegradable	OECD 301 F	20 mg/L

## 12.3. Bioaccumulative potential

### 12.3.1. Partition coefficient

#### For components

Substance (CAS Nr.)	Media	value	Temperature	pH	Concentration	Method
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	Log Pow	2,7 – 3,6				OECD 117
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Octanol-water (log Pow)	3,242	25 °C	7,1		OECD 117

### 12.3.2. Bioconcentration factor (BCF)

#### For components

Substance (CAS Nr.)	species	organism	value	Duration	Evaluation	Method	Remark
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	BCF		31				

## 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

#### For components

Substance (CAS Nr.)	Organism	Criterion	value	Evaluation	Method	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	Soil		4460			Koc
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	Soil		445			Koc

## 12.5. Results of PBT and vPvB assessment

No evaluation.

## 12.6. Other adverse effects

No information

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## 12.7. Additional information

### For product

Toxic to aquatic organisms: may cause long-term adverse effects in the aquatic environment.  
Do not allow to enter ground water, water course or sewage system.

### For components

**Substance: Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight  $\leq 700$ )**

Does not bioaccumulate.

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### 13.1.1. Product / Packaging disposal

##### Waste chemical

Suitable for incineration in approved incinerators or appropriate, authorized disposal plants. Disposal must be made according to official regulations: to leave it to authorized collector/remover/transformer of hazardous waste.

##### Packaging

Completely emptied containers leave to approved waste disposal authorities in charge. Empty containers or liners may retain some product residues. Unclean containers are classified as hazardous waste - should be handled the same as waste disposal. Empty container is not appropriate for reuse. Recycling is preferred to disposal or incineration.

#### 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

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  $\leq 700$ ), Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)

### 14.3. Transport hazard class(es)

9

### 14.4. Packing group

III

### 14.5. Environmental hazards

Additional labeling: Dangerous for the environment

IMDG: MARINE POLLUTANT

### 14.6. Special precautions for user

#### Limited quantities

5 L



# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

## Tunnel restriction code

(E)

## IMDG flashpoint

200 °C, c.c.

## IMDG EmS

F-A, S-F

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

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) 2015/830)
- 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.

## SECTION 16. OTHER INFORMATION

### Indication of changes

-

### Key literature references and sources for data

-

### 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.



- ☒ Provided correct labelling of the product
- ☒ Compliance with the local legislation
- ☒ Provided correct classification of the product
- ☒ Provided adequate transport data

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# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page

Product name: **EX9-15-A (epoxy)**

Creation date: **2.12.2016** · Revision: **12.12.2016** · Version: **1**

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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.