

**SAFETY DATA SHEET**

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

**XCR Epoxy Coating Resin****SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product identifier**

Product name : XCR Epoxy Coating Resin

Product code : XCR-A

EPOXY RESIN

UFI : TY09-F9QY-600X-4FHC

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

Recommended use : resin

Uses advised against : data not available

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

Company : Easy Composites Ltd  
 Unit 39 Park Hall Business Village,  
 Longton, Stoke-on-Trent, ST3 5XA

Telephone 01782454499

E-mail address sales@easycomposites.co.uk

**1.4. Emergency telephone number : . 01782 454499 (office hours only)****Other emergency numbers**

Health and Safety Executive (HSE) Chemicals Regulation Directorate - Telephone: +44 151 951 3317 -

**SECTION 2 : HAZARDS IDENTIFICATION****2.1. Classification of the substance or mixture****In compliance with EC regulation No. 1272/2008 and its amendments.**

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Germ cell mutagenicity, Category 2 (Muta. 2, H341).

Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

**2.2. Label elements****In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS05



GHS09



GHS08



GHS07

Signal Word :

DANGER

Product identifiers :

EC 216-823-5

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE

EC 236-211-1

1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE

EC 219-371-7

BUTANEDIOLDIGLYCIDYL ETHER

## XCR Epoxy Coating Resin

## Additional labeling :

EUH205 Contains epoxy constituents. May produce an allergic reaction.

## Hazard statements :

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H341 Suspected of causing genetic defects .  
 H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements - General :

P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.

## Precautionary statements - Prevention :

P202 Do not handle until all safety precautions have been read and understood.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/

...

## Precautionary statements - Response :

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor/...  
 P391 Collect spillage.

## Precautionary statements - Storage :

P405 Store locked up.

## Precautionary statements - Disposal :

P501 Dispose of contents/container to ...

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European CHemicals Agency (ECHA) under article 59 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

Identification	Classification (EC) 1272/2008	Note	%
CAS: 1675-54-3 EC: 216-823-5 REACH: 01-2119456619-26-XXXX  2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411		50 $\leq$ x % < 100
CAS: 13236-02-7 EC: 236-211-1 REACH: 01-2120804934-53-XXXX  1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE	GHS07, GHS05, GHS08 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Muta. 2, H341 Aquatic Chronic 3, H412	[ii]	25 $\leq$ x % < 50
CAS: 28064-14-4  REACTION PRODUCT OF PHENOL NOVOLAC AND EPICHLOROHYDRIN	Aquatic Chronic 4, H413		2.5 $\leq$ x % < 10
CAS: 2425-79-8 EC: 219-371-7 REACH: 01-2119494060-45-XXXX  BUTANEDIOLDIGLYCIDYL ETHER	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318		2.5 $\leq$ x % < 10

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Acute Tox. 4, H332  
Aquatic Chronic 3, H412

**Specific concentration limits:**

Identification	Specific concentration limits	ATE
CAS: 1675-54-3 EC: 216-823-5 REACH: 01-2119456619-26-XXXX  2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE	Skin Irrit. 2: H315 >=5% Eye Irrit. 2: H319 C>= 5%	dermal: ATE = 2000 mg/kg BW oral: ATE = 11400 mg/kg BW

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[ii] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures****In the event of exposure by inhalation :**

If inhaled, move the patient to fresh air and keep warm and rest.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

**In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

**4.3. Indication of any immediate medical attention and special treatment needed****Information for the doctor :**

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

Contact a specialist for treatment poisoning if large quantities have been ingested or inhaled.

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media****Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder

**Unsuitable methods of extinction**

In the event of a fire, do not use :

- water jet

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

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Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

Wear conform with the European standard EN 469.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid any contact with the skin and eyes.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

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

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Avoid exposure - obtain special instructions before use.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

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

No data available.

**Storage**

Keep out of reach of children.

Keep away from food and drink, including those for animals.

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

Use : Surfing, windsurfing,...

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters**

No data available.

**Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

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**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Workers.**

Dermal contact.  
Short term systemic effects.  
8.3 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Long term systemic effects.  
8.3 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Short term systemic effects.  
12.3 mg of substance/m3

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
12.3 mg of substance/m3

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Consumers.**

Ingestion.  
Short term systemic effects.  
0.75 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Ingestion.  
Long term systemic effects.  
0.75 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Short term systemic effects.  
3.6 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Long term systemic effects.  
3.6 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Short term systemic effects.  
0.75 mg of substance/m3

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
0.75 mg of substance/m3

**Predicted no effect concentration (PNEC):**

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Environmental compartment: Soil.  
PNEC : 0.065 mg/kg

Environmental compartment: Fresh water.  
PNEC : 6 µg/l

Environmental compartment: Sea water.  
PNEC : 1 µg/l

Environmental compartment: Intermittent waste water.  
PNEC : 0.013 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.341 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.034 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC :

10 mg/l

**8.2. Exposure controls**

Use only with adequate ventilation or provided with ventilation at the source.

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

**- Hand protection**

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Butyl Rubber (Isobutylene-isoprene copolymer)

**- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

Mask with filter type A, B, E, K, P

Attention! If the protection group is insufficient.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****Physical state**

Physical state :	Viscous liquid.
<b>Colour</b>	
Color :	purple
<b>Odour</b>	
Odour threshold :	Not stated.
<b>Melting point</b>	
Melting point/melting range :	Not relevant.
<b>Freezing point</b>	
Freezing point / Freezing range :	Not stated.
<b>Boiling point or initial boiling point and boiling range</b>	
Boiling point/boiling range :	Not relevant.

**Flammability**

Flammability (solid, gas) :	Not stated.
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**Lower and upper explosion limit**

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

**Flash point**

Flash Point Interval :	FP > 100°C.
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**Auto-ignition temperature**

Self-ignition temperature :	Not relevant.
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**Decomposition temperature**

Decomposition point/decomposition range :	Not relevant.
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**pH**

pH (aqueous solution) :	Not stated.
pH :	Not relevant.

**Kinematic viscosity**

Viscosity :	1 680 ± 320 mPa.s @ 25°C
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**Solubility**

Water solubility :	Insoluble.
Fat solubility :	Not stated.

**Partition coefficient n-octanol/water (log value)**

Partition coefficient: n-octanol/water :	Not stated.
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**Vapour pressure**

Vapour pressure (50°C) :	Not relevant.
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**Density and/or relative density**

Density :	1.18 ± 0.02 @ 20°C
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**Relative vapour density**

Vapour density :	Not stated.
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**Particle characteristics**

The mixture does not contain nanoforms.

**9.2. Other information**

Index of refraction :	1.5450 ± 0.002 @ 25 °C
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**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :

- frost

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO<sub>2</sub>)

**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Harmful if swallowed.

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May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

May cause an allergic reaction by skin contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and a respiratory tract sensitiser as well as an irritant.

Constituents with a low molecular weight irritate the eyes, mucous membranes and the skin

Repeated contact with the skin may cause irritation and hypersensitisation, possibly in combination with other epoxide compounds.

Cause for concern owing to the possibility that it may induce heritable mutations in the germ cells of humans.

**11.1.1. Substances****Acute toxicity :**

BUTANEDIOLDIGLYCIDYL ETHER (CAS: 2425-79-8)

Oral route : LD50 > 1000 mg/kg bodyweight/day  
Species : Rat

1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE (CAS: 13236-02-7)

Oral route : LD50 <= 2000 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Oral route : LD50 = 11400 mg/kg bodyweight/day  
Species : Rat

Dermal route : LD50 = 2000 mg/kg bodyweight/day  
Species : Rat

**Skin corrosion/skin irritation :**

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**11.1.2. Mixture****Respiratory or skin sensitisation :**

Contains epoxy compounds. May cause an allergic reaction.

**11.2. Information on other hazards****Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 1675-54-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

**SECTION 12 : ECOLOGICAL INFORMATION**

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity****12.1.1. Substances**

REACTION PRODUCT OF PHENOL NOVOLAC AND EPICHLOROHYDRIN (CAS: 28064-14-4)

Fish toxicity : Species : Leuciscus idus  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity : Species : Daphnia magna  
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE (CAS: 13236-02-7)

Fish toxicity : LC50 = 733000 mg/l  
Duration of exposure : 96 h  
Autres lignes directrices



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Crustacean toxicity :	EC50 = 2524.72 mg/l Duration of exposure : 48 h Autres lignes directrices
Algae toxicity :	ECr50 = 47972.73 mg/l Duration of exposure : 96 h Autres lignes directrices
2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)	
Fish toxicity :	LC50 = 1.3 mg/l Duration of exposure : 96 h OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)
Crustacean toxicity :	EC50 = 2.1 mg/l Species : Daphnia sp. Duration of exposure : 48 h OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)
	NOEC = 0.3 mg/l Species : Daphnia magna Duration of exposure : 21 jours OCDE Ligne directrice 211 (Daphnia magna, essai de reproduction)
Algae toxicity :	ECr50 > 11 mg/l Duration of exposure : 72 h

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability****12.2.1. Substances**

REACTION PRODUCT OF PHENOL NOVOLAC AND EPICHLOROHYDRIN (CAS: 28064-14-4)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE (CAS: 13236-02-7)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential****12.3.1. Substances**

1,2,3-TRIS (2,3-EPOXYPROPOXY) PROPANE (CAS: 13236-02-7)

Octanol/water partition coefficient : log K<sub>ow</sub> = -1.94

Bioaccumulation : BCF = 3.16

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Octanol/water partition coefficient : log K<sub>ow</sub> ≤ 3.78

Bioaccumulation : BCF < 100.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

**12.7. Other adverse effects**

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :**

07 01 08 \* other still bottoms and reaction residues

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

**14.1. UN number or ID number**

3082


**14.2. UN proper shipping name**

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, 1,2,3-tris (2,3-epoxypropoxy) propane)

**14.3. Transport hazard class(es)**

- Classification :




9

**14.4. Packing group**

III

**14.5. Environmental hazards**

- Environmentally hazardous material :



14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel	
	9	M6	III	9	90	5 L	274 335 375 601	E1	3	-	
*Not subject to this regulation if Q <= 5 l / 5 kg (ADR 3.3.1 - DS 375)											
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation		
	9	-	III	5 L	F-A. S-F	274 335 969	E1	Category A	-		
*Not subject to this regulation if Q <= 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)											
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ		
	9	-	III	964	450 L	964	450 L	A97 A158 A197 A215	E1		

	9	-	III	Y964	30 kg G	-	-	A97 A158 A197 A215	E1
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\*Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)  
For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.  
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.  
Marine pollutant (IMDG 3.1.2.9): (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15 : REGULATORY INFORMATION

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

Classification and labelling information included in section 2:

The following regulations have been used:  
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.  
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/197. (ATP 21)

Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.  
The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.  
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.  
The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects .
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.  
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.  
EC50 : The effective concentration of substance that causes 50% of the maximum response.  
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.  
NOEC : The concentration with no observed effect.  
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.  
ATE : Acute Toxicity Estimate  
BW : Body Weight  
DNEL : Derived No-Effect Level  
PNEC : Predicted No-Effect Concentration

## XCR Epoxy Coating Resin

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

GHS08 : Health hazard

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.

# SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)



## XCR Epoxy Coating Hardener

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

#### 1.1. Product identifier

Product name : XCR Epoxy Coating Hardener

Product code : XCR-B

EPOXY RESIN

UFI : FJ99-29RN-U00E-9KST

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

Recommended use : Hardener

Uses advised against : data not available

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

Company : Easy Composites Ltd  
Unit 39 Park Hall Business Village,  
Longton, Stoke-on-Trent, ST3 5XA

Telephone 01782454499

E-mail address sales@easycomposites.com

#### 1.4. Emergency telephone number : . 01782 454499 (office hours only)

#### Other emergency numbers

Health and Safety Executive (HSE) Chemicals Regulation Directorate - Telephone: +44 151 951 3317 -

### SECTION 2 : HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

#### 2.2. Label elements

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

612-067-00-9

EC 219-941-5

EC 500-101-4

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

1,3-CYCLOHEXANEDIMETHANAMINE

PHENOL, 4,4'- (1-METHYLETHYLIDENE) BIS-, POLYMER WITH

5-AMINO-1,3,3-TRIMETHYLCYCLOHEXANEMETHANAMINE AND (CHLOROMETHYL) OXIRANE

## Hazard statements :

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

## Precautionary statements - General :

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.

## Precautionary statements - Prevention :

P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/

...

## Precautionary statements - Response :

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor/...

## Precautionary statements - Storage :

P405 Store locked up.

## Precautionary statements - Disposal :

P501 Dispose of contents/container to hazardous waste.

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 59 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 612-067-00-9 CAS: 2855-13-2 EC: 220-666-8 REACH: 01-2119514687-32-XXXX  3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	GHS05, GHS07 Dgr Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317		25 $\leq$ x % < 50
CAS: 100-51-6 EC: 202-859-9 REACH: 01-2119492630-38-XXXX  BENZYL ALCOHOL	GHS07 Wng Acute Tox. 4, H302 Eye Irrit. 2, H319 Acute Tox. 4, H332	[I]	25 $\leq$ x % < 50
CAS: 2579-20-6 EC: 219-941-5 REACH: 01-2119543741-41-XXXX  1,3-CYCLOHEXANEDIMETHANAMINE	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412		10 $\leq$ x % < 25
CAS: 38294-64-3 EC: 500-101-4 REACH: 01-2119965165-33-XXXX  PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 2, H411		10 $\leq$ x % < 25

## XCR Epoxy Coating Hardener

5-AMINO-1,3,3-TRIMETHYLCYCLOHEXANEMETHANAMINE AND (CHLOROMETHYL) OXIRANE			
CAS: 39423-51-3 EC: 500-105-6 REACH: 01-2119556886-20-XXXX  PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 2, H411		1 <= x % < 2.5

**Specific concentration limits:**

Identification	Specific concentration limits	ATE
INDEX: 612-067-00-9 CAS: 2855-13-2 EC: 220-666-8 REACH: 01-2119514687-32-XXXX  3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	Skin Sens. 1A: H317 C>= 0.001%	oral: ATE = 1030 mg/kg BW
CAS: 100-51-6 EC: 202-859-9 REACH: 01-2119492630-38-XXXX  BENZYL ALCOHOL		dermal: ATE = 2000 mg/kg BW oral: ATE = 1230 mg/kg BW
CAS: 2579-20-6 EC: 219-941-5 REACH: 01-2119543741-41-XXXX  1,3-CYCLOHEXANEDIMETHANAMINE		dermal: ATE = 1700 mg/kg BW oral: ATE = 880 mg/kg BW
CAS: 39423-51-3 EC: 500-105-6 REACH: 01-2119556886-20-XXXX  PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA		oral: ATE = 550 mg/kg BW

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[i] Substance for which maximum workplace exposure limits are available.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures****In the event of exposure by inhalation :**

If inhaled, move the patient to fresh air and keep warm and rest.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

**In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

##### Information for the doctor :

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

Contact a specialist for treatment poisoning if large quantities have been ingested or inhaled.

## SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

#### 5.1. Extinguishing media

##### Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder

##### Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

#### 5.3. Advice for firefighters

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

Wear conform with the European standard EN 469.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

##### For non first aid worker

Avoid any contact with the skin and eyes.

##### For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

#### 6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

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

Neutralise with an acidic decontaminant.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

#### 6.4. Reference to other sections

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

#### 7.1. Precautions for safe handling

Always wash hands after handling.



Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

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

No data available.

**Storage**

Keep out of reach of children.

Keep away from food and drink, including those for animals.

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

Keep container tightly closed in a dry place.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

Use : Surfing, windsurfing,...

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes	
100-51-6		5 ppm 22 mg/m3		2 (I)	

**Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

4 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

4.9 mg of substance/m3

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Consumers.**

Ingestion.

Long term systemic effects.

0.5 mg/kg body weight/day

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

0.1 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term local effects.

0.00947 mg of substance/m3

BENZYL ALCOHOL (CAS: 100-51-6)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Short term systemic effects.

40 mg/kg body weight/day

## XCR Epoxy Coating Hardener

Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	8 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	110 mg of substance/m3

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	22 mg of substance/m3

**Final use:****Consumers.**

Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	4 mg/kg body weight/day

Exposure method:	Ingestion.
Potential health effects:	Short term systemic effects.
DNEL :	20 mg/kg body weight/day

Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	4 mg/kg body weight/day

Exposure method:	Dermal contact.
Potential health effects:	Short term systemic effects.
DNEL :	20 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	5.4 mg of substance/m3

Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	27 mg of substance/m3

**Predicted no effect concentration (PNEC):**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Environmental compartment:	Soil.
PNEC :	0.002 mg/kg

Environmental compartment:	Fresh water.
PNEC :	0.004 mg/l

Environmental compartment:	Sea water.
PNEC :	0.00044 mg/l

Environmental compartment:	Intermittent waste water.
PNEC :	0.044 mg/l

Environmental compartment:	Fresh water sediment.
PNEC :	0.0224 mg/kg

Environmental compartment:	Marine sediment.
PNEC :	0.00224 mg/kg

Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Environmental compartment:	Soil.
PNEC :	0.024 mg/kg

Environmental compartment: PNEC :	Fresh water. 0.033 mg/l
Environmental compartment: PNEC :	Sea water. 0.003 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 0.218 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.022 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 10 mg/l
BENZYL ALCOHOL (CAS: 100-51-6) Environmental compartment: PNEC :	Soil. 0.456 mg/kg
Environmental compartment: PNEC :	Fresh water. 1 mg/l
Environmental compartment: PNEC :	Sea water. 0.1 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 2.3 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 5.27 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.527 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 39 mg/l

## 8.2. Exposure controls

Use only with adequate ventilation or provided with ventilation at the source.

### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

#### - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled,

necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- Butyl Rubber (Isobutylene-isoprene copolymer)

#### - Body protection

Avoid skin contact.

Wear suitable protective clothing.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

Mask with filter type A, B, E, K, P

Attention! If the protection group is insufficient.

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Physical state

Physical state :	Fluid liquid.
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#### Colour

Color :	colorless to light yellow
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#### Odour

Odour threshold :	Not stated.
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#### Melting point

Melting point/melting range :	Not relevant.
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#### Freezing point

Freezing point / Freezing range :	Not stated.
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#### Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.
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#### Flammability

Flammability (solid, gas) :	Not stated.
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#### Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
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Explosive properties, upper explosivity limit (%) :	Not stated.
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#### Flash point

Flash Point Interval :	FP > 100°C.
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#### Auto-ignition temperature

Self-ignition temperature :	Not relevant.
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#### Decomposition temperature

Decomposition point/decomposition range :	Not relevant.
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#### pH

pH (aqueous solution) :	Not stated.
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pH :	Not stated.
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	Slightly basic.
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#### Kinematic viscosity

Viscosity :	125 ± 25 mPa.s @ 25 °C
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#### Solubility

Water solubility :	Soluble.
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Fat solubility :	Not stated.
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#### Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.
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#### Vapour pressure

Vapour pressure (50°C) :	Not relevant.
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#### Density and/or relative density

Density :	1.00 ± 0.02 @ 20 °C
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**Relative vapour density**

Vapour density :	Not stated.
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**Particle characteristics**

The mixture does not contain nanoforms.

**9.2. Other information**

Index of refraction :	1.5169 ± 0.002 @ 25 °C
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**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :

- contact with air
- humidity

**10.5. Incompatible materials**

Keep away from :

- strong oxidising agents

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Harmful if swallowed.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

May cause an allergic reaction by skin contact.

**11.1.1. Substances****Acute toxicity :**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Oral route : LD<sub>50</sub> = 550 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Dermal route : LD<sub>50</sub> > 1000 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 402 (Acute Dermal Toxicity)

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Oral route : LD<sub>50</sub> = 880 mg/kg bodyweight/day  
Species : Rat

Dermal route : LD<sub>50</sub> = 1700 mg/kg bodyweight/day  
Species : Rabbit

## XCR Epoxy Coating Hardener

BENZYL ALCOHOL (CAS: 100-51-6)

Oral route :

LD50 = 1230 mg/kg bodyweight/day

Species : Rat

Dermal route :

LD50 = 2000 mg/kg bodyweight/day

Species : Rat

Inhalation route (Dusts/mist) :

LC50 &gt; 4.178 mg/l

Species : Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

Duration of exposure : 4 h

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (CAS: 2855-13-2)

Oral route :

LD50 = 1030 mg/kg bodyweight/day

**Skin corrosion/skin irritation :**

BENZYL ALCOHOL (CAS: 100-51-6)

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Respiratory or skin sensitisation :**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Guinea Pig Maximisation Test (GMPT) :

Non-sensitiser.

Species : Guinea pig

OECD Guideline 406 (Skin Sensitisation)

BENZYL ALCOHOL (CAS: 100-51-6)

Guinea Pig Maximisation Test (GMPT) :

Non-sensitiser.

Species : Guinea pig

OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity :**

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Ames test (in vitro) :

Negative.

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Mutagenesis (in vivo) :

Negative.

Species : Mouse

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :

Negative.

With or without metabolic activation.

BENZYL ALCOHOL (CAS: 100-51-6)

Mutagenesis (in vivo) :

Negative.

Species : Mouse

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro) :

Negative.

Species : Bacteria

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

**Carcinogenicity :**

BENZYL ALCOHOL (CAS: 100-51-6)

## XCR Epoxy Coating Hardener

Carcinogenicity Test :

Negative.

No carcinogenic effect.

Species : Mouse

OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

**Reproductive toxicant :**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

No toxic effect for reproduction

Study on fertility :

Species : Rat

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development :

Species : Rat

OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

BENZYL ALCOHOL (CAS: 100-51-6)

No toxic effect for reproduction

**Specific target organ systemic toxicity - repeated exposure :**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Oral route :

C &gt;= 100 mg/kg bodyweight/day

Species : Rat

Duration of exposure : 90 days

OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Dermal route :

C &gt;= 160 mg/kg bodyweight/day

Species : Rat

Duration of exposure : 90 days

OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

BENZYL ALCOHOL (CAS: 100-51-6)

Oral route :

C = 400 mg/kg bodyweight/day

Species : Rat

Duration of exposure : 90 days

**11.1.2. Mixture**

No toxicological data available for the mixture.

**11.2. Information on other hazards****Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

**SECTION 12 : ECOLOGICAL INFORMATION**

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity****12.1.1. Substances**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Fish toxicity :

LC50 &gt; 100 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 = 13 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity :

ECr50 = 4.4 mg/l

Species : Selenastrum capricornutum

Duration of exposure : 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

## XCR Epoxy Coating Hardener

Fish toxicity :	LC50 = 130 mg/l Species : <i>Leuciscus idus</i> Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 65.4 mg/l Species : <i>Daphnia magna</i> Duration of exposure : 48 h OECD Guideline 202 ( <i>Daphnia</i> sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 = 58.4 mg/l Species : <i>Pseudokirchnerella subcapitata</i> Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)  NOEC = 14.4 mg/l Species : <i>Pseudokirchnerella subcapitata</i> Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
BENZYL ALCOHOL (CAS: 100-51-6) Fish toxicity :	LC50 = 460 mg/l Species : <i>Pimephales promelas</i> Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 230 mg/l Species : <i>Daphnia magna</i> Duration of exposure : 48 h OECD Guideline 202 ( <i>Daphnia</i> sp. Acute Immobilisation Test)  NOEC = 51 mg/l Species : <i>Daphnia magna</i> Duration of exposure : 21 days OECD Guideline 211 ( <i>Daphnia magna</i> Reproduction Test)
Algae toxicity :	ECr50 = 770 mg/l Species : <i>Pseudokirchnerella subcapitata</i> Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)  NOEC = 310 mg/l Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability****12.2.1. Substances**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Biodegradability : Non-rapidly degradable.

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

BENZYL ALCOHOL (CAS: 100-51-6)

Biodegradability : Rapidly degradable.

**12.3. Bioaccumulative potential****12.3.1. Substances**

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)



## XCR Epoxy Coating Hardener

Octanol/water partition coefficient : log K<sub>ow</sub> = -1.13

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Octanol/water partition coefficient : log K<sub>ow</sub> = 0.783  
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

BENZYL ALCOHOL (CAS: 100-51-6)

Octanol/water partition coefficient : log K<sub>ow</sub> = 1.1

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

**12.7. Other adverse effects**

No data available.

**German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 2 : Hazardous for water.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :**

07 01 08 \* other still bottoms and reaction residues

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

**14.1. UN number or ID number**

2735

**14.2. UN proper shipping name**

UN2735=POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(3-aminomethyl-3,5,5-trimethylcyclohexylamine, 1,3-cyclohexanedimethanamine)

**14.3. Transport hazard class(es)**

- Classification :



8

**14.4. Packing group**

II

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

## XCR Epoxy Coating Hardener

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C7	II	8	80	1 L	274	E2	2	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation	
	8	-	II	1 L	F-A. S-B	274	E2	Category A	SGG18 SG35	
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	8	-	II	851	1 L	855	30 L	A3 A803	E2	
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

**SECTION 15 : REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/197. (ATP 21)

**Container information:**

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

**Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):**

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

<https://echa.europa.eu/substances-restricted-under-reach>.

**Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

**Particular provisions :**

No data available.

**German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 2 : Hazardous for water.

**15.2. Chemical safety assessment**

No data available.

**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

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ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.