POLYCRAFT ECR 80 HARDENER

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

1.1. Product identifier

Product name : Polycraft ECR 80 Resin Product code : QL4270

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

Recommended use : Epoxy resin
Uses advised against : data not available

1.3. Details of the supplier of the safety data sheet

MB Fibreglass

Unit 17 & 20 Abbey Business Park, Mill Road Newtownabbey, Co. Antrim BT36 7EE

02890 861992 sales@mbfg.co.uk

1.4. Emergency telephone number (Office Hours Only):

Tel: 02890 861992

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).

Acute dermal toxicity, Category 4 (Acute Tox. 4, H312).

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

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.

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA

2.2. Label elements

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

Hazard pictograms :







GHS09

GHS05

H302 + H312

GHS07

Signal Word : DANGER Product identifiers : EC 500-105-6

Hazard statements :

Harmful if swallowed or in contact with skin.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

POLYCRAFT ECR 80 HARDENER

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:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/

...

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water/...

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 - 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) >= 0.1% published by the European

CHemicals Agency (ECHA) under article 57 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
CAS: 39423-51-3	GHS07, GHS05, GHS09		50 <= x % < 100
EC: 500-105-6	Dgr		
REACH: 01-2119556886-20-XXXX	Acute Tox. 4, H302		
	Acute Tox. 4, H312		
PROPYLIDYNETRIMETHANOL,	Eye Dam. 1, H318		
PROPOXYLATED, REACTION PRODUCTS	Aquatic Chronic 2, H411		
WITH AMMONIA			

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

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.

Consult a doctor.

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 any soiled or splashed clothing immediately.

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

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, 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.

POLYCRAFT ECR 80 HARDENER

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

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 (CO2)
- nitrogen oxide (NO)
- nitrogen dioxide (NO2)

5.3. Advice for firefighters

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

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.

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.

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.

POLYCRAFT ECR 80 HARDENER

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.

Separated from acids.

Packaging

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

7.3. Specific end use(s)

Recommended field of application: Casting

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

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

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

Final use:Workers.

Exposure method:

Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 1.6 mg/kg de poids corporel/jour

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 14 mg de substance/m3

Final use:Consumers.

Exposure method:
Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.8 mg/kg de poids corporel/jour

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 3.48 mg de 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 : 0.0044 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: 0.02 mg/kg

Environmental compartment: Marine sediment. PNEC : 0.002 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):

SAFETY DATA SHEET POLYCRAFT ECR 80 HARDENER







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 EN374.

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)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- 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 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 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:

Attention! If the protection group is insufficient.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state:

colorless to pale yellow				
Not stated.				
Strongly basic.				
Not relevant.				
218.50 °C.				
Not relevant.				
= 1				
0.97 ± 0.01 @ 20 °C				
Soluble. 562 g/l @ 20 °C				
-1.13				
90 ± 15 mPa.s @ 25°C				
Not relevant.				
Not relevant.				
Not relevant.				
1.4590 ± 0.002 @ 25 °C				
0				

Fluid liquid.

POLYCRAFT ECR 80 HARDENER

9.2. Other information

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

10.5. Incompatible materials

Keep away from:

- strong acids
- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- nitrogen oxide (NO)
- nitrogen dioxide (NO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Harmful if swallowed.

Harmful in contact with skin.

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.

11.1.1. Substances

Acute toxicity:

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

Oral route : LD50 = 550 mg/kg

Species : Rat

OCDE Test Guideline 425 (Acute oral toxicity - Dose adjustment

method)

Dermal route: LD50 > 1000 mg/kg

Species: Rat

OCDE Test Guideline 402 (Acute dermal toxicity)

Skin corrosion/skin irritation :

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

Species: Rabbit

OCDE Test Guideline 404 (Acute irritant/ corrosive effect on skin)

Species: Rabbit

OCDE Test Guideline 404 (Acute irritant/ corrosive effect on skin)

Germ cell mutagenicity:

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

Mutagenesis (in vivo): Negative.

OCDE Test Guideline 474 (The micro nucleus test on mammalian

erythrocytes

OCDE Test Guideline 471 (Reverse mutation assay in bacteria)

POLYCRAFT ECR 80 HARDENER

Ames test (in vitro): Negative.

With or without metabolic activation.

Reproductive toxicant:

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

Study on development : Species : Rat

OCDE Test Guideline 421 (Reproductive and Developmental

Toxicity Screening Test)

Specific target organ systemic toxicity - repeated exposure :

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

Dermal route : C > 160 mg/kg body weight / day

Duration of exposure: 90 Days

OCDE Test Guideline 411 (Subchronic dermal toxicity: 90 Days)

11.1.2. Mixture

No toxicological data available for the mixture.

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

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

Fish toxicity: LC50 > 100 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

OCDE Test Guideline 203 (Fish, Acute toxicity test)

Crustacean toxicity: EC50 = 13 mg/l

Species : Daphnia magna Duration of exposure : 48 h

OCDE Test Guideline 202 (Daphnia sp., Immediate immobilisation test)

Algae toxicity: ECr50 = 4.4 mg/l

Species: Selenastrum capricornutum

Duration of exposure: 72 h

OCDE Test Guideline 201 (Algae, 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.

12.3. Bioaccumulative potential

12.3.1. Substances

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

Octanol/water partition coefficient : log Koe = -1.13

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

PBT : no

 $\mathsf{P}:\mathsf{no.}\;\mathsf{B}:\mathsf{no.}\;\mathsf{T}:\mathsf{no.}$

vPvB : no vP: no. vB : no.

12.6. Other adverse effects

POLYCRAFT ECR 80 HARDENER

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, 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, preferably 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 2019 - IMDG 2018 - ICAO/IATA 2019).

14.1. UN number

3082

14.2. UN proper shipping name

 ${\tt UN3082=ENVIRONMENTALLY\ HAZARDOUS\ SUBSTANCE,\ LIQUID,\ N.O.S.}$

(propylidynetrimethanol, propoxylated, reaction products with ammonia)

14.3. Transport hazard class(es)

- Classification :



9

14.4. Packing group

Ш

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	E1	3	-
							375 601			

*Not subject to this regulation if Q <= 5 I / 5 kg (ADR 3.3.1 - DS 375)

	iot oabjoot to ti	no rogalation ii	Q . 01/010	9 (7 12 1 1 0.0	200.0)				
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregati
								Handling	on
	9	-	III	5 L	F-A, S-F	274 335	E1	Category	-
						969		Α	

*Not subject to this regulation if Q <= 5 | / 5 kg (IMDG 3.3.1 - 2.10.2.7)

	,			9 (,					
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	9	9	III	964	450 L	964	450 L	A97 A158	E1	
								A197		

POLYCRAFT ECR 80 HARDENER

9	9	III	Y964	30 kg G	-	-	A97 A158	E1
							A197	

^{*}Not subject to this regulation if Q <= 5 I / 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.

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

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. 2018/1480 (ATP 13)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2019/521 (ATP 12)
- Container information:

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

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2: Hazardous for water.

 $\hbox{-} Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704):$

NFPA 704, Labelling: Health=3 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



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.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations :

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

UFI: Unique Formula 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: Wassergefahrdungsklasse (Water Hazard Class).

GHS05: Corrosion

POLYCRAFT ECR 80 HARDENER

GHS07 : Exclamation mark GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.