

EPOXY RESIN

Technical information

Product for professional use only



Product components : component A - Epoxy Resin
component B – Polyaminic Hardening Agent

Volume: component A + component B : 1 lkg, 27kg
Epoxy repair kit : (component A + component B + glassfabric) : 250 g.

Product Description :



A constructional epoxy resin designed for manual laminating, fully compatible with glass and carbon fibres. The system viscosity was designed so as to ensure a balance between a good application and appropriate moisturizing of fibres. A fully hardened laminate shows very good mechanical properties and high temperature resistance.

Uses :

The product has wide range of applications. It does good both at the Site and during repairs of damaged elements of boat. Recommended for laminating, sealing up, enhancing surfaces, gluing and joining specified elements of construction. In combination with a fiberglass mat, it is used for manual repairs of major damages below and above the water line.

The product has excellent adhesion to a wide variety of surfaces. It may be applied onto surfaces made from: metal, also unprimed metal, steel and aluminum, epoxy and polyester laminates, and wood.

Physiochemical characteristics :

Colour: clear
Finish: gloss

Theoretical Output with :

Glass fibre mat :		Glass fabric :	
150 g/m ²	6÷7 m ²	200 g/m ²	÷5 m ²
300 g/m ²	3÷3,5 m ²	400 g/m ²	÷2,5 m ²
450 g/m ²	2÷2,5 m ²		

Mechanical Properties of a cured resin :

tensile strength :	80	MPa
elongation at break :	7	
tensile modulus :	3400	MPa
flexural strength :	130	MPa
tensile moduluj :	3400	MPa
compression :	110	MPa
impact resistance :	30÷40	kJ/m ²
thermal resistance :	64	°C

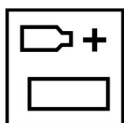
*data for curing conditions: 5h / 50°C

Preparing the surface:



Degrease the work surface, sand with a sandpaper of 80÷180 granulation. Remove dust and degrease again. Wash off salts and other contaminations with fresh water.

Component mixing proportions :



Resin : Hardening Agent
Parts by weight: (g) 100 : 35
Parts by volume: (ml) 100 : 40

CAUTION: Do not exceed the recommended amount of hardener!

Mix the ingredients together until a uniform colour is obtained. Do not mix bigger amount of the product than the one that can be used within the use by date.

Application conditions:

The minimum temperature for application of epoxy resin is +15°C. Best results can be achieved at the temperature of 20-25°C. The relative humidity should not exceed 70%.

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Application time :

after mixing them together with the hardener is 45 minutes at 23°C.

Application :



The proportions of using the resin in relation to fiberglass reinforcement:

- o 2 kg of resin per 1 kg of glass fibre mat.
- o 1 kg of resin per 1 kg of glass fabric.

Prepare an appropriate piece of glass mat in such a way that the mat overlaps approximately min 2 cm beyond the edge of the damaged spot. With a brush, apply the resin mixed with the hardener onto a clean spot. Apply mat, press it down firmly and saturate it with the resin with the aid of a brush; several layers of mat may be applied. Wait min. 7 hours and after this time the surface can be finished mechanically.

CAUTION: Do not pour the mixture remaining after lamination into a container.

Setting time :



7 hours at 20°C.

Full hardening within 7 days at 20°C.

Temperature below 20°C significantly extend the setting time..

The given times must be considered as guidelines only. The actual setting time may be shorter or longer and depends on film thickness, ventilation, humidity, etc.

Further Work :

After setting, the laminate surface should be sanded with a sandpaper of P80÷P120 gradation, and finished with Sea-Line epoxy filler.

For further works, it is recommended to use:

- Sea-Line epoxy primers
- Sea-Line topcoats

Caution: Before applying a polyester system like gelcoat, topcoat, it is recommended to cover with the laminate with a thin layer of Sea-Line Epoxy Lightprimer.

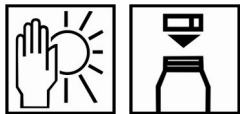
General Cautions :



During the work with epoxy products, it is necessary to use a functional personal protective equipment. One should their protect eyes and respiratory tracts. Rooms should be well ventilated. Tools should be washed directly after application.

Caution: In the interest of safety, always act in accordance with the data included in the technical data sheet for a given product.

Storage :



Product components should be kept in tightly sealed containers, in dry and cool spaces. After every use, containers should be closed immediately!

Caution: At low temperatures crystals may precipitate from the resin. It is demonstrated by turbidity or crystallization of the product. It is a reversible process. In such a case, the resin must be heated to the temperature of 50÷60°C. After dissolving of the crystals, the resin regains its full properties.

Expiration date :



Epoxy resin - 12 months from the date of production.

Polyaminic hardening agent - 12 months from the date of production.

Quality Guarantee :

Production, quality control, and the realization of deliveries fulfill the demands of ISO 9001 and 14001 standards.

All information is based on scrupulous laboratory research and many years of experience. Our position of market leadership does not free us from constant quality control of our products. However, we do not accept responsibility for the effects of improper use or storage of our products, or for the effects of using our products in any way contrary to the standards of good workmanship.

TROTON sp. z o.o. Ząbrowo.