

EPOXY RESIN/GELCOAT UV STABLE

CASTROPOX E7UV + CASTRODUR 331

DESCRIPTION

CASTROPOX E7UV is rather a thixotropic laminating resin based on aliphatic epoxy with high grade of UV stability.

USE

CASTROPOX E7UV tends less to crystallization at low temperature. Its viscosity enables good handling during application, but also creating thicker layers without danger of flowing down, especially during its application into a mold. Cured system features strong hardness, shape stability at various temperatures and also an excellent chemical resistance that predetermines this resin to be used as gelcoat with UV resistance.

Working instructions

The resin is applied on surfaces that have been thoroughly treated with release agent or – in case of epoxy primer gelcoats - just in time when the gelcoat is not completely cured yet (we recommend the demoulding wax OSKAR'S M700/C). This means that we can make a finger print in it, but it does not get sticky. The laminating mixture is interlayered with fabrics or mats as required. The recommended ratio of reinforcement/matrix varies from 45/55 % up to 65/35 %.

In order to increase heat resistance of the composite parts to above 65°C, it is recommended to postcure it by heat. The product is cured by heat for approx. 6 hours at 60°C or (when there is a requirement of maximum heat resistance) for another 3 hours at 90°C and then for 6 hours at 110°C up to 120 °C. During this process the temperature is GRADUALLY being increased (by max. 10°C per hour) up to the maximum. The process of cooling down also has follow the same steps (gradual course). Especially during the work with composite parts made of carbon, there is a counter tension during their cooling down.

ATTENTION: Too fast heating up may result in heat deformation of the product. On the other hand, if the cooling is too fast, it may cause its cracking. This is a general rule for all composite epoxy products.

Hardener Castrodur 331

Mixing ratio 100:30

Processability (pot life) of approx. 15-20 minutes.

With this hardener the resin is used as gelcoat or topcoat for composite products. The quality of the surface is good even without consequent heat treatment in case this hardener is used.

Technical parameters

Gelcoat Castropox E7UV Component A

Density	1'14 – 1'18	g/cm3/25°C
Viscosity	900 – 1200	mPas/25°C
Epoxy equivalent	170 – 180	g/kg
Epoxy value	0'46 – 0'47	-
Colour	Max. 3	Gardner

Heat resistance

Componente E7UV	Hardener Castrodur 311
A 25°C (7 días)	60°C
A 60°C (12 horas)	70°C
A 90°C (10 horas)	90°C
A 110 - 120°C (>4 horas)	-

Special features

- Very high shape stability at elevated temperatures
- Good mechanical properties
- Friendly to human skin

STORAGE AND PACKAGE

Storage temperature: min. +5°C, max. 30°C

Shelf life: 24 months (component A) and 12 months (hardener) in tightly sealed containers.

Working safety instructions: see relevant material safety data sheets.

Packaging: drums of 200kg, smaller quantities in canisters, buckets or jars if required.

Note

This technical data sheet has been created based on our latest knowledge and according to the best information and knowledge currently available. As we are unable to check if our products are used as recommended, we cannot guarantee the results. In spite of this, we will be glad to give an advice.