

SILICONES and more



Universal Epoxy Resin

Description

This universal epoxy resin is widely used in boat building and manufacturing. Because this resin can be used as laminating resin, glue, casting resin and coating, it is widely applicable. This epoxy can be processed in combination with wood, concrete, fiberglass, aramid fibers, basalt fibers and carbon fibers. The low viscosity means that the resin can impregnate well with the various fibers. After curing, the epoxy is very strong and impact-resistant.

Technical data

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| Mixing ratio (weight) | [A: B] | 100: 50 |
| Working Time @ 20°C | [min] | 20-25 |
| Demould time @ 20°C | [hours] | 12-18 |
| Color (UV-stabilised) | [Gardner] | <2, Colourless, Clear |
| Fully hardened @ 20°C | [days] | 5-7 |
| Hardness after curing | [Shore D] | 85 |
| Max pour thickness | [mm] | 50 |
| Tg1 glass transition temperature (ISO 11357-2) | [°C] | 55 |
| Density | [g/cm ³] | 1.11 |
| Viscosity | [mPa s] | 800 |

Processing

Please always use proper protection and read safety instructions. Mix A and B component in the weight ratio A:B = 100:50 very carefully. Please make sure the bottom and sides are mixed in well too. To be extra sure you can pour the mix into a second mixing cup and continue mixing. When casting the product into the mould try not to scrape the bottom and sides as the product there might be mixed less then the rest.

Please use a brush or paint roller to apply the epoxy when laminating. If you want to use the resin as a glue or as a filler, we advise to thicken the product using a filler (silica, wood fibres etc)

Processing time

The processing time is measured for 100 grams of product at 20°C. The processing and curing time depend on the amount of product processed and the (ambient) temperature / start temperature of the product. More product will generate more heat and a higher temperature will increase the curing speed. This will shorten processing time and curing time. Lower temperatures and smaller amounts will increase working time and demould time.

Please note the glass temperature is not very high. This means that the product may deform when it gets too hot (50-60 °C).

Important

The curing time in this system is highly dependent on the thickness and size of the object to be cast. If the shape is large and / or thick it will greatly shorten the curing and working time. The ambient temperature also plays an important role. This clear epoxy has a long working and demould time. In the case of smaller objects you can cure the cast at 40°C to speed up the process.

Storage

It is best to store this product between 18 °C en 28 °C in a closed container.

Please use materials once opened as a quickly as possible. When stored as indicated, the shelf life is at least 6 months.

Epoxy (even UV stabilised) will yellow slightly. This will not influence any of the other properties. Cured Epoxy products will be usable for many years.

Characteristics

- Universally usable crystal clear resin
- Moderate working time
- Laminating, bonding, casting and coating



Safety

In liquid form this product is harmful to your health. Avoid skin contact with either component. Vapours of this product may cause respiratory irritation with prolonged or frequent use. When handling this product, wear protective gloves. Always work in a well ventilated area. For further information see Safety Data Sheet.