SILICONES and more

Epoxy Crystal Clear

This system is designed for the casting of both small and larger clear castings with high strength.

Description

A crystal-clear epoxy casting system comprising an A and B component. The epoxy is crystal clear and the added UV blocker keeps it this way for a longer period of time.. This epoxy is very easy to pour because of its good viscosity. Use of a vacuum pump, after mixing the components, will help precenting air entrapments..

Technical data

| Mixing ratio (weight) | [A: B] | 100: 47 |
|--|----------------------|-------------------|
| Working Time @ 20°C | [min] | 25-35 |
| Ontmaltijd @ 20 ºC * | [hours] | 24-48 |
| Color (UV-stabilised) | [-] | Colourless, Clear |
| Fully hardened (100 g, 40 ° C) Fully hardened (100 g, 40 ° C) | [days] | 2 14 |
| Hardness after curing | [Shore D] | 82 |
| pour Thickness | [mm] | 1 to 100 |
| Modulus of elasticity Tensile (NF T 51-034) | [N/mm ²] | 3.300-2.900** |
| Elongation at break Tensile (NF T 51-034) | [%] | 2.8-4.8** |
| Tensile resistence (NF T 51-034) | [N/mm ²] | 66-64** |
| Modulus of elasticity Flexural (NF T 51-001) | [N/mm ²] | 3.300-2.900** |
| Flexural strength (NF T 51-001) | [N/mm ²] | 103-106** |
| Elongation Flexural (NF T 51-001) | [%] | 7.3-10.2 ** |
| Tg1 glass transition temperature (ISO 11357-2) | [°C] | 56* or 62** |
| | | |

* Full hardness after> 14 days at 23 °C

** Values after curing 48 hours at 23 $^\circ$ C, 8 hours at 40 $^\circ$ C and 16 hours at 60 $^\circ$ C

Processing

While processing this material always use liquid-proof protective gloves and goggles and work in a well ventilated area. Add the A and B component in the right proportion to each other (A: B = 100: 47) and mix well. Pour the mixed product with a constant and thin jet into the mold whilst avoiding air entrapment. You can avoid excessive heat development in castings of more than 50mm thickness by casting successive layers (leave the layer to harden till it becomes sticky before the following layer). Demould only after the specified time has elapsed. The thermal and mechanical properties will develop rapidly, but it is possible to improve the thermal behavior of the casting by post curing it for 8 hours at 40°C and then 16 hours at 60°C.

Please note the glas temperature is not very high. This means that the product may deform when it gets too hot (50-60 $^{\circ}$ 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 $^{\circ}$ C to speed up the process.

The recommended cure cycle above will increase the properties of the epoxy.

Packing

The crystal clear epoxy casting system is supplied in a kit consisting of an A and B-component.



Characteristics

- Crystal Clear
- UV resistant
- Designed for fast, accurate castings
- Can be poured from a layer thickness of 1 mm
- Low viscosity (liquid)
- After 48 hours demouldable (at 20 °C)
- Can be molded without vacuuming.

Durability

This epoxy is best stored in a dry place between 18 ° C and 28 ° C. Opened packages should be processed as quickly as possible to ensure product quality. The shelf life of well-closed containers in the manner indicated is usually 6 months.

Safety

In liquid form this product is harmful to your health. Avoid skin contact with either component. Vapors 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.

No rights can be justified on this description. Read the safety instructions on www.siliconesandmore.com before use

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