

DESCRIPTION

CHILL 3D is a 100% reactive epoxy system with medium viscosity and high ultraviolet resistance. The CHILL 3D allows to give depth and brilliance to your artistic canvas or other substrates such as concrete, wood, metals among others.

The CHILL 3D is the ideal product for casting up to 0.500 inches thick. Its characteristic of thixotropy makes it possible to stabilize the pigments and to avoid a separation in the casting.

Its pot life also allows fast handling time, depending on the density and design of the piece.

This system also meets the European RoHS standard.

CARACTERISTICS

- High quality raw materials
- Easy mixing ration of 2A/1B by volume
- Excellent UV resistance
- Glossy Finish
- Excellent impact resistance
- Medium viscosity
- Crystal clear transparency
- Meet the RoHS standard
- No withdrawal

APPLICATION

Store **CHILL 3D** on a pallet (do not store directly on the floor) or shelf @ 22 °C with relative humidity less than 60%. A cold environment will increase the viscosity of each part A and B and a warmer environment will decrease it.

Before using **CHILL 3D**, be sure to mix each Part A and B. Minimize air formation as much as possible by gently mixing for a minimum of 5 to 10 minutes with a metal spatula.

Mix exactly **1 parts of A** with **1 part of B** by volume (or **100 A / 85 B** by **weight**) and make sure to mix evenly, making sure to scrape the edges and the bottom of your container.

Since the pot life of the system is 60 minutes @ 22 ° C for a mass of 200 grams, be sure not to mix more material that can be applied within the life time pot. It is important to note that the pot life time will be shortened in a warmer environment and will be lengthened in a cooler environment. The handling time will reflect the temperature level. Also, the greater the amount of resins to be mixed, the shorter the pot life time will be.

Uncured material can be easily cleaned using isopropyl alcohol or **T-901 solvent**.

Contact **POLYMERES TECHNOLOGIES** for more information. support@polymerestechnologies.com

TYPICAL PROPERTIES (AT 22°C)

| | | PART A | PART B | MIXED |
|-----------------------------|-------------------|---------------|-------------|-------------|
| Viscosity | Brookfield (cps) | 3600 | 3400 | 3500 |
| Consistency | | Liquid | Liquid | Liquid |
| Density | g/cm ³ | 1.141 | 0.975 | 1.054 |
| Mixing Ratio | 1. By volume | 1 | 1 | 1/1 |
| | 2. By weight | 100 | 85 | 100/85 |
| Color | | Transparent | Transparent | Transparent |
| Pot life | | 60 minutes | | |
| Gel Time | | 75 minutes | | |
| Peak Exothermic Temperature | ASTM D 2471-71 | 161°C | | |
| Full cure* | | 3 days @ 22°C | | |

PHYSICAL PROPERTIES (solid state) 7 days after cure at 22°C

| TEST | METHOD | RESULTS | |
|-------------------------------|---------------------|--|-------------------------|
| | | | |
| Hardness | ASTM D 785 65 | Shore D | 82 |
| Compressive strength | ASTM D 695 80 | MPa* % max. strain | 89.54 4.6% |
| Tensile strength | ASTM D 638 TYPE 1 | MPa | 47 |
| Flexural strength | ASTM D 790A | MPa | 122 |
| Elongation | ASTM D-790A | Mpa | 4.4% |
| Deflection Temperature (°C) | | 1. 455 kPa [†] 2. 1820 kPa | 56 °C 54 °C |
| Impact resistance | ASTM D 256 81 | J/m [‡] | 4 |
| Linear shrinkage | ASTM D 2566 79 | cm/cm | 0.00021 |
| Abrasion resistance | TABER CS 17-1000 GR | | 0.059 |
| Coefficient of linear thermal | ASTM D 696 79 | | 4.12 x 10 ⁻⁵ |

PRECAUTIONS

- Consult Material Safety Data Sheet prior to use.
- Normal health and safety precautions should be observed when handling these products.
- Ensure good ventilation.
- Wear gloves safety glasses and protective clothing.
- Once the container is opened **POLYMÈRES** has no control or responsibility for the shelf life.
- Shelf life of product in original closed containers is **one (1) year**.

It is recommended to follow Provincial and Federal safety regulations. In case of eye contact, rinse well with water, in case of skin contact, rinse with soap and water. Keep away from children.

GARANTEE

Having no control over the use and application of this product, the manufacturer and / or the distributor cannot guarantee the result obtained. The warranty is therefore limited to the replacement of a product that the user has demonstrated to the satisfaction of the manufacturer and distributor that it is actually defective. Before using this product, the user must ensure that the product is suitable for its intended use. Only the user assumes the risks related to this use. The user must ensure that this product meets his needs by conducting tests in the short, medium and long term to validate the results and in the conditions of use and according to the instructions provided. This limited warranty excludes all liability for consequential, incidental or special damages. Except as described above, the user expressly acknowledges and accepts at the time of the purchase of this product that the manufacturer and / or distributor disclaims any other liability and any other express or implied warranty of quality and an implied warranty of quality of the material are expressly excluded.

* After material has solidified the curing process can be accelerated at 52°C (125°F).

* MPa = 145 lb

† kPa = .145 psi

‡ 53.4 J/m = 1 blf/inch