

VALPLAST® 2C

Product Description

This is a two component polyurethane injection system, which is highly reactive. It is much recommended for water carrying structures (against pressurized water). It is CFC and Halogen free.

Characteristics / Advantages

- Immediate sealing
- Deep Injection
- Chemically Stable
- Can permeate into cracks/fissures of width over 0.1 mm.
- Expands in volume due to external water
- Recommended for rehabilitation/sealing of leaking/wet tunnels, shafts, masonry etc.
- Hardening in wet or water-carrying mountains.
- Sealing of water streams from rocks, dams, mountains
- Foundation hardening

Technical Parameters

| Properties | Comp. A | Comp. B |
|---------------------------|-----------------|------------|
| Color | Honey - Colored | Dark Brown |
| Viscosity mPa.s | at 25°C | 290 ± 50 |
| | at 15°C | 550 ± 50 |
| Density Kg/m ³ | 1025 ± 30 | 1235 ± 30 |
| | | |

Flash point: A & B > 200 °C. Mixing ratio 1:1 volumetric.

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|--|---|
| Adhesive strength after 15' | 2.1 MPa |
| Tensile strength (non-foaming) | approx. 42 MPa |
| Compressive strength (non-foaming) | approx. 70 MPa |
| Dynamic E modulus | approx. 3000 MPa |
| Shore Hardness | D 80 |
| Reaction Time in contact with water at 20°C | Starts at 50" Ends at 140" |
| Reaction Time without contact with water at 20°C | Starts at 28" Ends at 40" |
| Foaming Factor | Without contact of water 1-2 In contact of water 1-8 |

*Values can vary site due to heat exchange between resin and structure. Lab Based values

How it Works?

- Shake component A before use.
- Both components are injected in a 1:1 ratio by volume using a two-component injection pump.
- In the pump static mixer combines both components and injects them into the structure (rock/mountain) side through an infusion seal.
- In contact with water, the resin will yield foam. The ensuing reaction mix will displace the mix already present; as this does not encounter any more water, it hardens to form a non-porous material without any foaming. In this manner, a watertight membrane is produced.
- Store the products before processing at a minimum temperature of 15°C for at least 12 hours as the recommended processing temperature is between 15°C and 30°C.

Storage

Store away from frost and heat in a dry area. Storage temperature is between 5°C and 35°C. Shelf Life – 1 Year approx.

In case the product has cooled down to low temperatures, it should be reheated to a minimum of 15°C before using it.

Safety

Avoid to breathe dust/fume/gas/mist/vapours/spray. If required, wear respiratory protection. Always wear protective gloves/clothing and eye/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,
If on skin or hair: Remove all contaminated clothing immediately. Rinse skin with water or take shower.

Legal Notes

All data in our product information are based on our current knowledge and experience. They do not release users from careful testing of the application and strict observation of the relevant processing regulations because of the wide range of possible influences during the application and use of our products. Legally valid assurances of specific characteristics or suitability for special purposes of application other than those provided in our documentation for the specific product cannot be inferred from our information. The recipient or processor of our products at their own responsibility must follow any protective

rights or existing laws and provisions. Moreover our general terms and conditions of sale and warranty are valid.