

A fast-reacting two-component polyurethane injection system, CFC and halogen free. For sealing and hardening in water-carrying zones, particularly against pressurized water.

## APPLICATIONS

- Rehabilitation and sealing of wet shafts, tunnels, channels and masonry.
- Hardening in wet or water-carrying mountains.
- Sealing of water streams from mountains, rocks, dams.
- Securing the pillar/support transition.
- Hardening of foundations.
- Other special applications.

## PROPERTIES AND BENEFITS

- Suitable for deep injection.
- Sealing works immediately.
- The resin is very chemically stable.
- Permeates into fissure widths over 0,1 mm.
- Expands in volume through effect of external water.
- Only one working day is needed for permanent sealing.

## APPLICATION PRESCRIPTIONS

**IMPORTANT:** before use, shake component A (drums can be rolled). Both components are injected in a 1:1 volume ratio by means of a two-component injection pump. A static mixer combines both components and injects them into the mountain side through an infusion seal. When coming into contact with water, the resin will 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. We recommend storing the products before processing at a minimum temperature of 15°C for at least 12 hours in order to reach the recommended processing temperature of between 15°C and 30°C.

## TECHNICAL DATA

Purinject 2C W	Colour	Viscosity mPa.s		Density kg/m <sup>3</sup>
		At 25 °C	At 15 °C	
Comp. A	Honey-coloured	290 ± 50	550 ± 50	1025 ± 30
Comp. B	Dark brown	200 ± 50	500 ± 100	1235 ± 30

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

## MECHANICAL DATA

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

Without contact with water	
Initial temperature	20 °C
Start of Reaction	ca 28"
End of Reaction	ca 40"
Foaming factor	1-2
In contact with water	
Initial temperature	20 °C
Start of Reaction	ca 50"
End of Reaction	ca 2'20"
Foaming factor	ca 18

The indicated data are laboratory measurements. These values may differ in applications due to heat exchange between resin and mountain, humidity, pressure and other factors.

## PACKAGING

The quantities contained in the packaged containers correspond approximately to the dosage ratio of the components (1:1 volumetric). PURINJECT 2C W is available in the following packaging units:

- Component A: 23 kg in 25 l metal container
- Component B: 27 kg in 25 l metal container

The different weights of the containers correspond to a volumetric ratio of 1:1 because of the different densities.

## STORAGE

For both components, original unopened containers, when stored in dry areas at temperatures between +5°C and +35°C, have a shelf life of 12 months after production. When the product has cooled down to low temperatures, it should be reheated to a minimum of 15°C before processing. Component A is susceptible to frost damage. The legal requirements for storage should be observed.

## SAFETY AND HEALTH PRECAUTIONS

Do not breathe dust/fume/gas/mist/vapours/spray.  
 In case of inadequate ventilation wear respiratory protection.  
 Wear protective gloves/clothing and eye/face protection.  
**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**If on skin or hair:** Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 Unhardened, fluid material may not be allowed to penetrate into sewers or come into contact with public water bodies. Remove any spilled material using an absorbent such as sawdust or sand and dispose in accordance with local disposal requirements.  
 The hardened material is non-hazardous.  
 For more information, consult the safety data sheet.