

VALPLAST® 1C 115 ECO

Product Description

This is a single component, solvent free, polyurethane injection system, which is highly recommended for crack injection/water leaks in concrete and masonry structures. When reacts with water, forms a semi-rigid polyurethane foam (slightly flexible). Recommended for concrete and Masonry structures.

Characteristics / Advantages

- It is solvent free and non-flammable
- High Tensile Strength
- Excellent Bonding strength
- Chemically inert
- No effect of freeze and thaw cycles
- This can be used for sealing water ingress in tunnels segments joints
- Corrosive environments do not affect Valplast
- Sealing expansion joints
- Sealing wet, non-structural cracks
- Expansion Joint

Technical Parameters

Characteristics of Resin		
Subject	Norm	Values
Colour		Brown
Viscosity	EN ISO 3219:1994	± 96 mPa.s
Isocyanate	EN 1242:2006	18.1 M.-%
Flash point		> 150 °C
Density	EN ISO 2811-2:2002	1158 kg/m ³

Characteristics of the Catalyst		
Subject	Norm	Values
Colour		Transparent
Density	EN ISO 2811-2:2002	889 kg/m ³
Viscosity	EN ISO 3219:1994	21 mPa.s
Flash point		> 150 °C

*Values can vary site to site as per the conditions

How it Works?

When reacts with water, it makes a semi rigid polyurethane foam. The end product doesn't shrink or swells. It yields a good compressive strength in a very short time. The formation of CO² makes the foam penetrable very well into the cracks. Best to inject with counter pressure.

For injection:

- Use resin with catalyst in a ratio 6% to 10% to achieve desired reaction time.
- Use packers and a 1 component pump (manual or automatic).
- As it is very hygroscopic and packed under dry atmosphere should be use opened containers as soon as possible or recap under dry nitrogen.
- Clean pumps immediately with PU pump cleaning solutions

Reaction

Expansion – 4000 %

Catalyst – 6% to 10%. More the catalyst faster is the reaction. [®]

Quantity of catalyst	Reaction Time	Polymerisation
6%	15 seconds	70 seconds
8%	12 seconds	55 seconds
10%	9 seconds	45 seconds

Storage

Store away from frost and heat in a dry area. It is sensitive to moisture and temperature. Reseal when partly used, by covering with nitrogen.

Storage temperature is between 10°C and 30°C. Shelf Life – 1 Year approx.

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 takeshower.

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.