

VALPLAST® 1C FLEX

Product Description

This is a single component, solvent free, polyurethane injection system, which is highly recommended for water cut-off in wet dynamic cracks/ joints. When reacts with water, forms a very flexible PU foam.

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 Valfoam
- Sealing expansion joints
- Sealing wet, non-structural cracks
- Can also be used to seal dry, moving cracks by using it with water in 1:1 ratio
- Expansion Joint
- Sewer Pipes etc.

Technical Parameters

Characteristics of Resin		
Subject	Norm	Values
Colour		Yellow
Viscosity	EN ISO 3219:1994	± 245 mPa.s
Isocyanate	EN 1242:2006	7.7 M.-%
Flash point		> 150 °C
Density	EN ISO 2811-2:2002	1080 kg/m ³

Characteristics of the Catalyst		
Subject	Norm	Values
Colour		Transparent
Density	EN ISO 2811-2:2002	913 kg/m ³
Viscosity	EN ISO 3219:1994	7.4 mPa.s
Flashpoint		> 150 °C

*Values can vary site to site as per the conditions

How it Works?

When reacts with water, it makes a flexible polyurethane foam with closed cells. The product, when injected under pressure, does not shrink or swells. It yields a good compressive strength in short time. Best to inject with counter pressure.

Reaction

Expansion – 800 %

Catalyst – 6% to 10%. More the catalyst, faster is the reaction.

Quantity of catalyst	Reaction Time	Polymerisation
6%	30 seconds	115 seconds
8%	25 seconds	90 seconds
10%	20 seconds	75 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.