# **VALINJECT® PUS**

## **Product Description**

This is a two-component urea silicate foam, which is highly reactive. It is much recommended for cavity fillings.

## **Characteristics / Advantages**

- Good adhesion to wet surfaces
- User friendly
- Low smell
- Environment friendly
- Chemical Stability is good
- Suitable for spray as well
- Highly reactive. Can be used where foaming speed, flexibility and flame retardantproperties are required

It neither expands nor absorbs water after mixing components. Suitable for

- Filling cavities in concrete and strata.
- For consolidation of fractured rock, sands gravel sand.
- For stabilization of cavities in tunnels.

### **Technical Parameters**

Properties	Comp. A	Comp. B
Color	Clear, colourless	Dark Brown
Viscosity mPa.s at 25°C	20 - 80	150 - 400
Flash Point	> 200°C	> 200°C
Density Kg/m³ at 25°C	1350-1500	1150-1300

<sup>\*</sup>Values can vary site due to heat exchange between resin and structure. Lab Based values

#### **How it Works?**

- Both components come in pre packed drums.
- Both components are injected in a 1:1 ratio by volume using a two-component injectionpump.
- In the pump static mixer combines both components and injects them into the structure(rock/mountain) side through an infusion seal.
- The curing reaction time is significantly dependent on the temperature of the PU resin, the rock and the ground water. Foam factor is significantly dependent on water content.
- in component A. Density range also depends on water content incomponent A and isocyanate reactive groups in component B.
- To achieve the best mixing of the components during injection, the inclusion of a static in-line mixer in connection with the mixing head is essential. The length of the static mixer should be min. 50 cm long for correct mixing.
- Store the products before processing at a minimum temperature of 15°C for at least12 hours as the recommended processing temperature is between 15°C and 30°C.

Reaction data: A:B 1:1 by volume		
Reaction Start Time	10 - 30 s and 50 s for tack free	
Foam Factor	20 – 25 times	

<sup>\*</sup>Values can vary site due to heat exchange between resin and structure. Lab Based values

## **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 shouldbe reheated to a minimum of 15°C before using it.

### Safety

Avoid to breath 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.