

Solvent-free polyurethane injection resin for soil stabilization. Harmless for the environment and resistant to biological influence.

APPLICATIONS

PURINJECT 1C SOIL polyurethane injection system is a one component solvent free, very low viscosity pre-polymer ideally suitable for soil stabilization. In some circumstances can be used for crack repair in concrete. The generation of carbon dioxide gas will virtually improve the viscosity and make the resin penetrate in the finest sand. Reacted with water, it will form a very rigid polyurethane which yields a hydrophobic and chemically resistant conglomerate with the substrate (well saturated ground layers). A good compression strength is achieved in a very short time without shrinking or swelling.

OPERATIONAL DATA

PURINJECT 1C SOIL and its catalyst are very hygroscopic and packed under dry nitrogen. Use open containers as soon as possible or recap under dry nitrogen. Shake the catalyst well and make sure the mixture is homogeneous. Mix the resin and the accelerator in a ratio of 0,5 to 2%. The system can be injected as a single shot injection system using ordinary 1 component pumps (manual, pneumatic or electrical).

TECHNICAL DATA

UNCURED POLYURETHANE PRE-POLYMER	
Colour	Brown
Aspect	Liquid
Relative density at 25 °C	1,12 kg/l
Flashpoint	> 150 °C
Viscosity at 25 °C	< 25 mPa.s
Shelf life at 20 °C	12 months

PHYSICAL CONSTANTS OF THE CATALYST	
Colour	Transparent
Aspect	Liquid
Relative density at 25 °C	0,98 kg/l
Flashpoint	> 150 °C
Viscosity at 25 °C	21 mPa.s

CHARACTERISTICS OF THE CURED PRODUCT	
Compressive strength	ca. 12 MPa
Flexural strength	ca. 2 MPa
Density	ca. 1,1 kg/dm ³

REACTION TIME

Quantity of catalyst	Reaction
0,5 %	9 - 11 minutes
1,0 %	5 - 6 minutes
2,0 %	2 - 3 minutes

Indication at 20 °C.

PACKAGING

- Resin: 25 kg drums
220 kg drums
1000 kg IBC
- Catalyst: 0,5 l
5 l
25 l

Can be supplied under private label.

STORAGE

The PURINJECT components are very stable materials when properly handled. To avoid problems, it is very important to understand that these materials are both temperature and moisture sensitive. Therefore, materials should be stored in an area with temperatures not exceeding 30°C or not lower than 10°C. The maximum shelf life is 2 years. All partially used drums should be covered by nitrogen and re-sealed to prevent the ingress of moisture. Pumps should be cleaned with PURCLEAN, a cleaning product specially developed for cleaning and greasing of polyurethane injection pumps.

SAFETY AND HEALTH PRECAUTIONS

For more information, consult the safety data sheet.