PURINJECT 1C 55 LV TDS

One component, solvent free, low viscosity polyurethane injection system ideally suitable for crack injection/water leaks in concrete and masonry structures. Reaction with water yields a semi-rigid polyurethane foam (slightly flexible). To be injected with a one-component pump. Use with 6 to 10% catalyst.

HOW DOES PURINJECT 1C 55 LV WORK?

Reaction with water yields a polyurethane semi-rigid foam (slightly flexible). The formation of CO_2 makes the foam penetrate very well into the cracks. The reaction speed can be adapted easily by varying the accelerator or catalyst content from 6 to 10%. The more catalyst is added, the faster the reaction velocity. The end product neither shrinks nor swells. A good compression strength is obtained in a very short time. Free expansion: +2000%.

APPLICATION PRESCRIPTIONS

Shake the catalyst well. Mix the resin and the accelerator in a ratio of 6% to 10% in function of the desired reaction speed. For injection: use packers and a 1 component pump. (manual or automatic). PURINJECT 1C 55 LV is very hygroscopic and packed under dry atmosphere. Use opened containers as soon as possible or recap under dry nitrogen. Pumps should be cleaned with PURCLEAN, a cleaning product specially developed for cleaning of polyurethane injection pumps.

TECHNICAL DATA

Physical characteristics of the uncured polyurethane prepolymer		
Subject	**Value**	**Norm**
Density	1,175 ± 0,025 g/cm³	EN ISO 2811-2:2002
Viscosity	55 ± 15 mPa.s	EN ISO 3219:1994
Flash point	> 150°C	
Colour	Brown	

Physical characteristics of the catalyst		
Subject	**Value**	**Norm**
Density	0,889 g/cm³	EN ISO 2811-2:2002
Viscosity	21 mPa.s	EN ISO 3219:1994
Flash point	> 150°C	
Colour	Transparent	

Physical characteristics of the cured material		
Subject	**Value**	**Norm**
Density	1,170 g/cm³	BS EN ISO 1183:2019
Flexural strength	ca 8,5 N/mm²	BS EN 196-1:2016
Compressive strength	ca 17 N/mm²	ASTM C109/C109M: 2016a

REACTION TIME

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

Indication at 20°C. Free expansion: +2000% of starting volume.

PACKAGING

Standard packaging:

- 25 kg resin and 2,5 litre catalyst
  Pallet: 600 kg resin and 60 litres of catalyst
- 10 kg resin and 1 litre catalyst
  Pallet: 750 kg resin and 75 litres of catalyst

Other type of packaging available on request. Can be supplied under private label.

STORAGE

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 partly used drums should be covered by nitrogen and resealed to prevent the ingress of moisture.

SAFETY AND HEALTH PRECAUTIONS

For more information, consult the safety data sheet.