

ISOMAT INJECT-PU 820

Rigid, water-sealing injection resin

Description

ISOMAT INJECT-PU 820 is a low-viscosity, MDI-based, water-reactive, polyurethane injection resin. It reacts with water and forms rigid, hydrophobic sealing foam.

It has the following properties:

- It forms hard, high-strength sealing foam in the crack or joint.
- It is fast reacting and curing.
- It seals leakages or active, high flow (and/or high hydrostatic pressure) water leaks.
- It penetrates deep into fine cracks.
- It reacts with water, forming CO₂ gas. This gas produces a swelling pressure and the resin expands to foam, preventing any water penetration.
- Free expansion: min. 1,700% - 2,200%.
- It does not shrink after curing.
- It shows excellent adhesion to mineral construction materials (such as concrete, cement, brick), metal and certain plastics.
- The reaction speed can be controlled by varying the amount of catalyst.
- It is chemically resistant against water, weak acids and alkali, mineral oils, fungus and bacteria, ground water, sea water and petroleum products.

Fields of application

ISOMAT INJECT-PU 820 is used as a waterstop for the sealing of leakages or for stopping active, high flow (and/or high hydrostatic pressure) water leaks.

Technical data

| | |
|------------------------|----------------|
| Color: | dark brown |
| Density of resin: | 1.10-1.20 kg/l |
| Density of catalyst: | 0.923 kg/l |
| Viscosity of resin: | 111 mPa.s |
| Viscosity of catalyst: | 36 mPa.s |

Reaction time of 65 g of resin + catalyst + 20g of water:

| | % catalyst | Start of reaction | End of reaction |
|------|------------|-------------------|-----------------|
| 10°C | 2 | 55" | 4'18" |
| | 6 | 26" | 1'38" |
| | 9 | 20" | 1'10" |
| 15°C | 2 | 46" | 4'06" |
| | 6 | 21" | 1'34" |
| | 9 | 18" | 1'15" |
| 20°C | 2 | 44" | 3'30" |
| | 6 | 19" | 1'17" |
| | 9 | 13" | 54" |
| 25°C | 2 | 38" | 3'15" |
| | 6 | 18" | 1'16" |
| | 9 | 12" | 51" |

Directions for use

Add ISOMAT INJECT-PU 832 catalyst into ISOMAT INJECT-PU 820 and mix thoroughly. Inject the mixture with a single component pump (manual, electric, pneumatic) into the crack. Because of its low viscosity, the resin will penetrate deep into the cracks. ISOMAT INJECT-PU 820 polymerizes into rigid hydrophobic foam.

Packaging

ISOMAT INJECT-PU 820 (resin): 25 kg.
ISOMAT INJECT-PU 832 (catalyst): 2.3 kg.

Shelf-life/Storage

12 months from production date, if stored in original, unopened packaging, at temperatures between +10°C and +30°C. Once the packaging is opened, the shelf life of the product diminishes quickly and the product should be consumed, as soon as possible.

ISOMAT INJECT-PU 820

Remarks

- Clean the pump and equipment every time the procedure is interrupted for more than 15 minutes, or whenever necessary and at the end of the injection.
- Avoid contact of the product with the skin and eyes. Wear safety glasses, gloves and an overall. In case of contact with the eyes, wash with plenty of water and seek medical attention. In case of contact with the skin, wash with plenty of water.
- Use sand to absorb spilt resin and dispose, according to the local regulations.
- The product reacts with water. If contaminated with moisture, it may form CO₂ gas pressure in containers.

ISOMAT S.A.
BUILDING CHEMICALS, MORTARS & PAINTS
HEADQUARTERS – THESSALONIKI, GREECE
17th km Thessaloniki – Ag. Athanasios Road
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece
T +30 2310 576000
www.isomat.eu e-mail: support@isomat.eu