DRYINJECT 800

HYDROEXPANSIVE INJECTABLE POLYURETHANE RESIN

PRODUCT DESCRIPTION

Dryinject 800 is a one-component, permanently flexible, hydro-expansive polyurethane resin (increases its initial volume by approximately 8 times), solvent-free, ideal for sealing small and large water infiltrations in concrete or masonry walls in general. It is perfect for filling and sealing small cavities, joints, and discontinuities subject to movement.

FEATURES

DRYKOS Dryinject 800, in contact with water, forms a flexible polyurethane foam. Technically, it is a one-component product that reacts spontaneously with the water present in the masonry to be sealed. However, the reaction speed with water alone would be very slow for construction site needs. Therefore, it is essential to use an expansion accelerator, sold in combination with the resin itself (Component B).

The polyurethane foam resulting from the injection process, once expanded, will maintain its volume stability. Good resistance to hydraulic pressure from incoming water will be achieved after approximately 7-12 minutes from the start of the reaction. The formation of CO_2, typical of the polyurethane reaction, will provide additional pressure to the system, facilitating the penetration of the resin into cracks and voids. DRYKOS Dryinject 800 expands approximately 8 times its initial volume in a free environment.

ADVANTAGE

Stopping water infiltrations in underground areas. Ideal for filling and sealing small cavities, cracks, static and dynamic joints in concrete and masonry walls in general.

AREAS OF APPLICATION

Concrete, bricks, tuff, mixed masonry, stone masonry, rock walls

APPLICATION METHOD

The application surfaces must be clean, free from dirt, friable and incoherent parts, dust, moss, mold, etc. Prepare the appropriate injectors, usually arranged at a distance of about 15 cm from each other on both sides of the discontinuity/crack to be sealed. Inject plenty of water into the discontinuity until it is saturated (if not already present).

Pour 100 g of Component B for every kilogram of Component A (ideal and recommended dosage) into a bucket. Thoroughly mix the two components with a manual tool (do not use a mixing drill). Note that the resin may react with the ambient humidity, so to reduce material waste, it is recommended to prepare a quantity of mixture strictly necessary for each intended use (2-3 kg of mixture at a time may be more than sufficient).

The mixture of DRYKOS Dryinject 800 and its corresponding catalyst can be injected with a pump for one-component resins, manual or electric, at variable pressures ranging from 40 to 200 bar.
The reaction speed can be easily adjusted based on the amount of accelerator (Component B). Adding a larger amount of catalyst, more than the recommended 10%, will reduce the reaction time.

LIMITATIONS

The usage temperature ranges from +8°C to +35°C.
After completing the operations, always thoroughly clean the pump used with Nitro solvent and the specific lubricating detergent DRYKOS Pump Cleaner.
Always use gloves and protective goggles during preparation and application.

HEALTH AND SAFETY

The user is advised to consult the Safety Data Sheet of the product, containing chemical-physical and toxicological data, risk phases, and other information for safe transport, use, and disposal of the product and its packaging. It is also important not to disperse the product and its packaging into the environment.
DRYKOS Dryinject 800 is packaged under dry nitrogen and is very sensitive to moisture, even ambient humidity. It is recommended to use a small amount at a time and carefully reseal the cans before storing them.
Ensure the secure fit of the injectors positioned on the substrates. Given the high injection pressures reached by the pumps, if the injectors are not securely and correctly positioned, there is a concrete risk that they may come out at high speed from their seat (posing a risk of injury to operators!). Carefully study the placement of the injectors near the masonry discontinuities to be injected. Poor positioning, too close to the crack to be filled, can cause the rupture of the support itself under the pressure of the pump.
Exercise extreme caution when using electric pumps, which can easily reach pressures of 200 bar, and therefore, cause unwanted breaks in the concrete and masonry supports subject to injections.
Remove the excess resin that leaks from the walls within a few hours of stopping the infiltrations. Delayed removal may be more difficult.

STORAGE

The components of DRYKOS Dryinject 800 are quite stable if treated correctly. To avoid possible issues, it is important to remember that these materials are very sensitive to both temperature and humidity. Always store these products at a temperature between 10°C and 30°C.
Finish open barrels as soon as possible or repackage them, filled with nitrogen to prevent moisture penetration. Clean the pump used with DRYKOS Pump Cleaner.
DRYKOS Dryinject 800 has a shelf life of 12 months when stored according to the recommended instructions.

WARRANTY

If the product is found to be defective, Drykos' liability is limited to replacing the product itself. As Drykos has no control over the use of the product by the user, the latter must ensure that the product is suitable for the intended use, assuming all risks and responsibilities related to it.

PACKAGING

Available in
Resin (Component A): 25 kg can.
Catalyst (Component B): 2.3 kg container.

TECHNICAL SPECIFICATIONS

Hydro-expansive polyurethane injectable resin	
Colour	Brown
Specific Gravity	1,08 kg/dm3
Viscosity at 20°C	130 mPa·s

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