Syntech HAG Eco

Hydro-expansive polyurethane resin, without solvents, injectable

Mono-component, enabled for contact with drinking water, semi-flexible, expanding (increases its initial volume of about 20 times) polyurethane resin, free from solvents, perfect for sealing small and large water leaks in the concrete or in solid masonry in general by injection. Perfect for filling large voids and loose stone foundations inside the walls.

CUSTOMS CODE: 3909 5090
COMPONENTS: Two-components
APPEARANCE: Liquid + Liquid
AVAILABLE COLORS: Brown
PACKAGING AND DIMENSIONS: Plastic can 20 kg [A] - Plastic can 2 kg [B] - Kit: 1 Plastic can 20 kg [A] + 1 Plastic can 2 kg [B] - Pallet: 48 x (Kit 22 Kg)

OBTAINED CERTIFICATIONS AND REGULATIONS

FEATURES AND BENEFITS

In contact with water, SYNTECH H.A.G. ECO, forms a semi-flexible polyurethane foam. The product increases its initial volume by about 20 times in contact with fresh water. If used in environments with the presence of sea water, the expansion will take place in any case but slightly reduced in volume. Technically, it is a mono-component product which reacts spontaneously with the water present in the masonry to be sealed. The speed of reaction with just water, however, would be very slow relative to the construction site requirements. It is therefore essential to use an expansion accelerator, sold in combination with the same resin (component B). The polyurethane foam resulting from injection operations, will keep its volume stable once expanded. A good resistance to hydraulic pressure in the water flow after about 1-2 minutes from the time the reaction took place. The formation of CO_2, typical of the polyurethane reaction, will further pressurise the system, thus favouring the penetration of the resin in the cracks and cavities. In a free environment, SYNTECH H.A.G. ECO expands to about 20 times its initial volume.

FIELDS OF APPLICATION

Stop the infiltration of water in underground spaces. Perfect for waterproofing filling large cavities or loose stone foundations in the concrete and in solid masonry in general.

ALLOWED SUPPORTS

Concrete - Bricks - Tuff - Mixed walls (bricks and stones) - Stone walls - Rock walls

PREPARATION OF SUPPORTS

The application surfaces should be clean, free of incrustations, crumbling and non-adhering parts, dust, moss, moulds, etc. Prepare the appropriate injectors, usually "staggered" (from one side to the other of the discontinuity to be sealed). Preliminarily inject abundant water in the discontinuity until saturation (if not already present).

MODE OF USE

Pour 100 g of component B for each kilogram of component A (ideal and recommended dosage), in a bucket. Mix the two components thoroughly with a hand tool (do not use a mixer drill). Keep in mind that the resin could react even with the environmental humidity, therefore, to reduce the waste of material it is advisable to prepare a quantity of mixture strictly necessary for the intended use from time to time (2-3 kg of mixture at a time may be more that sufficient). The mixture of SYNTECH H.A.G. ECO and its catalyst can be injected with a manual or electric pump for monocomponent resins, at pressures ranging between 40 and 200 bar. The reaction speed can easily be adjusted based on the accelerator (component B) quantity. Adding a greater quantity of catalyst, compared to the recommended 10%, reduces the reaction time. Always clean the pump used thoroughly at the end of the operations with Nitro thinner and the specific lubricant detergent SYNTECH H.A.G. CLEANER.

APPLICATION METHODS

Injection - Pump

TOOL CLEANING

Nitro thinner

KEY FEATURES

- Density: 1.15 kg/dm³
- Hydroexpansive product: +2000 %
- Shelf-life: 12 months
- Temperature of use: +8 / +35 °C
- Use wearing protective gloves
- Highlighted product
- Pot-life: <5 min
- Solvent-free
- Use wearing protective glasses

TECHNICAL SPECIFICATIONS

Viscosity **90 mPas**

CONSUMPTION

The consumption of the product depends on the size of the vacuum volume to be filled and on the expansive reaction that occurs after mixing the two components in relation to the amount of water present.

STORAGE AND CONSERVATION

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Opened containers must be used immediately. Protect from humidity. Store the product at a temperature between +10°C and +30°C.

PHOTO GALLERY



ADDITIONAL CONTENT

WARNINGS AND PRECAUTIONS

SYNTECH H.A.G. ECO is physiologically harmless once the reaction has taken place. The product is packaged under dry nitrogen and is very sensitive to humidity, also environmental. It is recommended that you use a very small quantity at a time and carefully close the whitewash before putting them to rest. Ensure the secure sealing of the injectors placed in the supports. Given the high injection pressures reached by the pumps, in the case of injectors not positioned securely and correctly there is a real risk that they might come out at high speed from their seat (with the risk of injury to the operators!). Carefully study the positioning of the injectors near the masonry discontinuities to be injected. Bad positioning, too close to the crack to be filled, can cause the breaking of the support itself under the pressure of the pump. Take all due care during the use of the electric pumps, which can easily reach a pressure of 200 bar, and thus cause undesired breaking of concrete and masonry supports being injected. Remove resin residues overflowing from masonry within a few hours of stopping infiltrations. Delayed removal may be more difficult.
The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.
Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.
Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.
It is forbidden to dispose of the product and/or packaging in the environment.