Corkseal

Hydro-expansive rubber plugs for tubular PVC formwork spacers

Corkseal are special hermetic sealing devices for tubular formwork spacers, consisting of a rigid polyamide plastic core and a corrugated cap in hydro-expansive rubber. The hydro-expansive cap of Corkseal is intended to guarantee the hermetic sealing of the inside of the tubular spacer. It is fitted into the hole produced by the tubular spacer, by simple striking. Corkseal caps are available in different diameter sizes: Corkseal T21 = 21 mm; Corkseal T24 = 24 mm; Corkseal T26 = 26 mm; Corkseal T32 = 32 mm; Corkseal T34 = 34 mm.

CUSTOMS CODE: 3926 9097
COMPONENTS: Single-component
APPEARANCE: Plastic plug
AVAILABLE COLORS: Blue
PACKAGING AND DIMENSIONS: Corkseal T21: 1 x (Small bag 100 unit) - Corkseal T24: 1 x (Small bag 100 unit) - Corkseal T26: 1 x (Small bag 100 unit) - Corkseal T32: 1 x (Small bag 100 unit) - Corkseal T34: 1 x (Small bag 100 unit)

FIELDS OF APPLICATION

Concrete subterranean construction by metal formwork, where the wall is in direct contact with the ground and where there is the presence of waterproofing layers external to the masonry itself: basements, tavernas, underground garages, underground rooms and basements, etc.

ALLOWED SUPPORTS

Concrete - Tubular spacers for steel formworks

MODE OF USE

The sealing protection Corkseal should be used after the removal of metal formworks, thus only on spacers already "in work" and immersed in the concrete. The installation of the sealing protection to be executed by simply inserting the plug by hand, inside each empty spacer, as far as possible, to then complete the insertion using a light hammer until "full insertion". Even though Corkseal has been designed and tested to withstand pressures up to about 5 bar in negative thrust (i.e. from inside the masonry), it is advisable to apply the product in positive thrust, therefore, by inserting it from the external side of the masonry, after stripping and before backfilling. It is advisable to use the product in combination with non-"preformed" spacers (which often have changes in diameter depending on the model and which therefore might affect the hermetic sealing at high pressures of the protective sealing. It is recommended to use the spacers sold in rods to be cut to size directly on site . The insertion of Corkseal in spacers not assembled in the works (in the absence of external contrast) could cause the spacer itself to break. In cases of expansion with very marked changes in volume (>500%), and in the absence of restrictive conditions, there may be some superficial lacerations; these phenomena do not compromise the features that protect the protective sealing and especially they do not occur under normal operating conditions, i.e. when the expansive phenomenon is in constrained conditions with reference to the usable volume (inside the spacer).

APPLICATION METHODS

Hammer

KEY FEATURES

- Hydroexpansive product: +200 / +600 %
- Shelf-life: 24 months
- Nonflammable

TECHNICAL SPECIFICATIONS

Alkali-resistant material

Non-toxic material

Odorless

CONSUMPTION

No. 1 cap of Corkseal for each formwork spacer provided, preferably on the side where the water exerts positive thrust.

STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Protect from humidity.

PHOTO GALLERY



ADDITIONAL CONTENT

Performance

From the point of view of the mechanical pressure tightness, various tests, performed in several independent European laboratories, have shown that the Corkseal hermetic protection can withstand pressures up to 0.5 MPa (4.93 atm) in negative thrust, if applied correctly. It should be noted that the product has exceeded even the test in the worst possible conditions, i.e. providing for the instantaneous application of the peak pressure of 0.5 MPa and before the hydro-expansive seals being minimally hydrated. The tests were carried out using a tubular spacer segment in rods of 2 metres, commonly available on the market, inserted in a cube of hardened concrete, to simulate the actual conditions of use. The tests of sealing under pressure under counter pressure were performed with a duration of peak pressure not less than 72 h. It should be noted that the seal, in case of installation of Corkseal in positive thrust, is certainly much higher, given the intrinsic geometry of the product.

The expansion tests where the expansive gasket of Corkseal was subjected, were performed using four different types of aqueous solutions:

• demineralised water
• groundwater (obtained with the concentrations limit imposed by Legislative Decree 152/06: Ph 7.7 , sulphates 250 mg/l nitrate 50 mg/l, chlorides 200 mg/l, iron 0.2 mg/l, manganese 0.05 mg/l, nickel 0.2 mg/l)
• salt water (NaCl 3.6%)
• base solution Ph 12.0 (to simulate the conditions in contact with concrete)
In the experimental tests of immersion in the solutions described, the product displayed a change in average volume at 30 days not less than 190%.

WARNINGS AND PRECAUTIONS

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.