

# Clayseal 25.20

## Waterstop with sodium bentonite and expanding rubber base



Preformed hydro-expansive sealing waterstop joint, for hermetic sealed construction joints in structures, walls and foundations, made with a mixture of sodium bentonite, expanding rubber and special aggregating polymers ("hydrocarbon" ). Clayseal 25.20 has a rectangular cross-section of 25x20 mm, packaged in rolls of 5 m each.

**CUSTOMS CODE:** 4005 9100

**COMPONENTS:** Single-component

**APPEARANCE:** Stripe

**AVAILABLE COLORS:** Black

**PACKAGING AND DIMENSIONS:** Box: 6 x (Roll 5 m) - Pallet: 48 x (Box 21 Kg)

## FEATURES AND BENEFITS

Clayseal 25.20 is a simple and easy to apply sodium bentonite waterstop; it does not require any special preparations of the media, pre-shaped seats etc. It is easily fixed by nailing and does not require any special protection. In contact with water, it increases its volume through the formation of a stable colloidal system that guarantees the permanent hermetic sealing of the connection; the initial expansion is delayed through a retardant coating with respect to the first contact with water, to avoid deformations in the initial hardening phase of the fresh concrete.

## FIELDS OF APPLICATION

Rigid construction joints (non-expanding) and connections with safe and permanent hydraulic seal.

## ALLOWED SUPPORTS

Concrete - Cement-based or lime-based mortars - Prefabricated concrete - Rock walls

## PREPARATION OF SUPPORTS

Prepare the smoothest and most planar laying surface, using Repar Tix to compensate for any inhomogeneity, and accurately remove crumbling, non-adhering, powdery parts.




## MODE OF USE


Hand spread the Clayseal 25.20 sodium bentonite waterstop in the designated position. Fixing is performed by nailing: one steel nail every 20-25 cm approximately. The sealing of joints between the waterstop kerbs is ensured by simple flanking by at least 10 cm and not by overlapping the ends. For particularly complex applications, the specific Bentonet steel wire cage, with square mesh 13x13 mm, in profiles of 1 metre each, is available. The positioning must ensure a concrete covering of 10-12 cm in order to contain the expansive action caused by hydration. Similarly, the formwork spacers should be placed in such a way as to maintain a minimum distance of 8 cm from the bentonite kerb itself. Although the product has a delayed expansion of 48h, it is not recommended for use in cases of earlier time-frames or with excessive humidity (for example in the presence of puddles). In case of groundwater with a high saline content or for leachate and waste water stops, carry out preliminary expansion tests or request the specific waterstop Clayseal 25.20 SW.

## APPLICATION METHODS


Hammer - Apply by hand

## KEY FEATURES

 Density: 1.4-1.5 kg/dm<sup>3</sup>

 Shelf-life: 12 months

 Hydroexpansive product: +350 %

 Temperature of use: -15 / +50 °C

## TECHNICAL SPECIFICATIONS

Sodium bentonite content ~**70 %**

Expansion after 7 days at pH 12.33 **+110 %**

Expansion after 7 days in demineralized water with pH~7 **+250 %**

Expansion after 10 days at pH 12.33 **+128 %**

Expansion after 10 days in demineralized water with pH~7 **+350 %**

Hydraulic leak test (14 days at 5 bar) **no leaks**

*ASTM D71*

Unit weight **0.67 kg/m**

*DIN 4102-1*

Fire resistance **B 2**

Longitudinal elongation at break **60 %**

Odorless

## CONSUMPTION

1.1 m/m: Use 1 metre of Clayseal 25.20 for each linear metre, being careful to place 5-10 cm of the product alongside the end/start roll points to guarantee the permanent water tightness of the system.

## STORAGE AND CONSERVATION

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. Protect from humidity.



## PHOTO GALLERY



## ADDITIONAL CONTENT

### **Extract from the experimental test report**

There follows an extract of the remarks summarizing the experimental report of the test performed by the Laboratory Cismondi Srl of Cuneo, with code 135/CHI / 15/09/0252 del 06.04.2009:

*Laboratory tests have shown that Clayseal 25.20 presents an increase in volume in contact with the water of 243.4 %; a value to be considered high and more than sufficient for the function it must fulfill. The surface of the sample remains smooth, compact and free of flaws. The concrete resists to expansion, thus Clayseal 25.20, compared to its high volume increase, will exert a good expansion pressure on site by preventing the permeation of the water at the points of casting. The increase in volume to a pH 12.33 is 110.4 %, a value greater than the smallest parameter of volume increase (100 %). The surface of the sample remains smooth, compact and free of flaws. Clayseal 25.20 is a suitable product to be used in a basic environment, in contact with fresh concrete and cured).*

## 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](http://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](http://www.azichem.com).

It is forbidden to dispose of the product and/or packaging in the environment.

