

# Claytex

# Waterproofing sodium bentonite geotextile



Flexible waterproofing geotextile for active waterproofing of underground structures, containing a uniform layer of granular sodium bentonite, with a high montmorillonite content, equal to  $5.0 \text{ kg/m}^2$ , consisting of a needled geotextile fabric with nylon fibres interfaced with non-woven geotextile in weight 100%. Claytex are supplied in two different sizes: Claytex 120 = rolls of  $1.20 \times 5$  m (6 m²), weighing approximately 32 kg per roll and Claytex 250 = rolls of  $2.50 \times 20$  m ( $50 \text{ m}^2$ ), weighing approximately 270 kg per roll.

CUSTOMS CODE: 5911 9099 COMPONENTS: Single-component

APPEARANCE: Roll

**AVAILABLE COLORS: Beige** 

PACKAGING AND DIMENSIONS: Claytex 120: 1 x (Roll 6 m²) - Claytex 250: 1 x (Roll 50 m²)

# **OBTAINED CERTIFICATIONS AND REGULATIONS**



# **FEATURES AND BENEFITS**

The products of the Claytex line consist of natural sealants activated by water, with strong self-sealing properties. Their bentonite layer is continuous and uniform. The porosity of the protective and containment sheets is aimed at allowing a quick and proper hydration of the hydro-expansive material. The bottom geotextile layer of the Claytex products is made of polypropylene fabric of 115 g/m², while the upper geotextile layer is made of nonwoven polypropylene of 220 g/m².

# FIELDS OF APPLICATION

Waterproofing of underground structures in general, in the presence of groundwater risk. Waterproofing of waters containment basins, water channels and landfills.

# ALLOWED SUPPORTS

Plasters - Concrete - Cement-based or lime-based mortars - Bricks - Tuff - Mixed walls (bricks and stones) - Stone walls



# PREPARATION OF SUPPORTS

The surfaces of the application walls must be free of protrusions, cavities, gravel pockets, through holes for formworks, discontinuities from construction joints etc. For this reason, they should be preliminarily reclaimed with anti-shrinkage mortar (REPAR family) or with bentonite-based preparations (Claygrain). The support must absolutely be compact, otherwise it will be necessary to pre-create a suitable concrete subbase upon laying the bentonite sheet.

# **MODE OF USE**

The geotextiles should be placed with the polypropylene side facing the support (the darker side) and fixed by anchor nails with washers; in vertical walls, the installation must proceed from the bottom, after having made a suitable cement mortar cove, to be made preferably with Osmocem 447, at the corners produced between the base slab and the elevation wall, in order to facilitate laying the sheet. Each mat must overlap with the adjacent one by at least 10 cm, arranged to ensure the vertical joints are staggered. It is essential to ensure the mats have an appropriate flap at the geometric discontinuity of the work, of the top of the structures etc. Pay particular attention to laying the bentonite sheets at the corners, wells, stairs, and reinforcement rods protruding from the floor slab. Avoid proceeding with concrete covering works of bentonite mats in anticipation of heavy rains. In the impossibility of a timely backfill it is necessary to provide for the temporary protection of mats with polyethylene geotextiles of 100-150 g/m². In case bentonite geotextiles have been installed outside the perimetral brickwork, do not backfill the excavation with material other than sand (sharp rocks, crushed by the weight of dry aggregates, could tear the bentonite sheet). For more information please contact our Technical Service.

#### **KEY FEATURES**



Material 100% eco-friendly

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Shelf-life: 12 months

# **TECHNICAL SPECIFICATIONS**

ASTM D 6768
Breaking load longitudinal **17.7 kN/m**ASTM D 5890
Swelling rate **30**ASTM D 5993
Bentonite mass per area unit **5.1 kg/m²**ASTM D 5891

ASTM D 6496
Peeling 662 N/m

EN ISO 9663-1
Dry thickness 6.5 mm

EN 16416
Coefficient of permeability < 3.5 x 10E-12 m/s

ASTM D 6768
Longitudinal elongation at break 18.6 %

# CONSUMPTION

Fluid loss 13 ml

 $1.1 \text{ m}^2/\text{m}^2$ : Use  $1 \text{ m}^2$  of Claytex for every  $\text{m}^2$  of surface to be covered, making sure to overlap the rolls by at least 10 cm at the edges of the mat to ensure permanent water tightness of the system.

# 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. Protect from humidity. Store the product at a temperature between +5°C and +35°C.



# **PHOTO GALLERY**







# **ADDITIONAL CONTENT**



# **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.

