

OSM.0349

OSMOCEM iTOP

Osmotic plastic-deformable twocomponent waterproofing cement



Customs Code

3824 5090



Packaging

- Bag 25 kg [A]
- Plastic can 8 kg [B]
- Kit: 1 Bag 25 kg [A] + 1 Plastic can 8 kg [B]

Application

- Finishing trowel
- Plastering machine
- Brush
- Paint roller
- Spatula
- Sprayer

Family

Osmocem Osmotic two-components cements

Product Lines Functional Cathegories • Agua Osmotic waterproofing

 Building · Structural maintenance of dams, reservoirs, ducts and Infratech water ducts

Structural maintenance of tunnels

· Horizontal cement waterproofing of terraces and **balconies**

Components Appearance Two-components Powder + Liquid

Certifications and legislations



EN 1504-2

Products and systems for the protection and repair of concrete structures - Surface protection systems for concrete



D.M. 06/04/2004, n. 174

Regulation concerning materials and objects that can be used in fixed systems for the collection, treatment, adduction and distribution of water intended for human consumption (in implementation of Directive 98/83/CE).

General **description**

A two-component osmotic cementitious waterproofing in water dispersion, being a modified polymer that is super adhesive and flexible, resistant to positive and negative thrusts. Application by trowel, brush or roller. Ideal for protective coatings and waterproofing of reinforced concrete and masonry works such as tanks, swimming pools, water pipes, cracked cement plasters or balconies. It is also used for repairs and protective coatings of structures offshore or exposed to sea salt. Suitable for contact with drinking water.

General **features**

OSMOCEM iTOP is characterised by an extreme ease of application, being veritably fool-proof. It permits adherence to supports for mechanical adhesion and osmotic diffusion. It is also effective in conditions of negative hydrostatic thrust (counterthrust) and is applicable as a coating in rooftop gardens and planters due to its resistance to the mechanical action of roots.

Dosage

Approximately 1.6 kg/m² of OSMOCEM iTOP for each millimetre of thickness to be made.

Fields of **application**

Waterproofing treatments for underground structures and masonry, swimming pools, tubs, planters, rooftop gardens, ducts, tunnels, pits, bridges, tanks, basements, food containment areas and so on whereby sufficiently porous and absorbent, being free from any water-resistant and/or water-repellent surface treatment, be it chemical (siloxanes, epoxy, polyurethane, etcetera) or natural (waxing). Suitable for both positive and negative hydrostatic thrust conditions, it can also be used for waterproofing terraces and balconies.

Basic **features**

1.5 mm

Shelf-life:

12 months



Highlighted product



Maximum diameter of aggregate:

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To be applied in two coats

Min. recommended thickness:



< 0.4 mm



Pot-life: 50-70 min



Temperature of use: +5 / +35 °C



Available colours White / Grav

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Technical specifications

Determinazione dell'aderenza per trazione diretta (Fh) (UNI

EN 1542): 2.2 N/mm²

Capillary absorption (UNI EN 1062-3): 0.027 kg•h^0.5/m²

Coefficient of permeability (UNI EN 1062-3): < 5 mm

Compressive strength after 28 days: > 9.0 N/mm²

Compressive strength at 02 days: 2.5 N/mm²

Density: 1600 g/l

Exposure to artificial weathering-2000 hours (UNI EN 1062- no swelling, no cracking,

11): no flakin

Flexural strength after 28 days: > 3.0 N/mm²

Flexural strength at 2 days: > 1.0 N/mm²

Longitudinal elongation at break (DIN 53504): 15 %

Mixing ratio of the components A:B: 3.12:1

Permeability to CO2 (UNI EN 162-6): Sd 93 m

Permeability to water vapor (UNI EN ISO 7783-2): Sd 0.9866 $_$

Thermal compatibility after cooling shocks - storm cycles: 1.8 N/mm²

Tools **cleansing**

• Water

Applicable on

- Plasters
- · Concrete
- · Prefabricated concrete
- Fiber-cement
- Bricks
- · Mixed walls (bricks and stones)
- · Stone walls
- · Floor screed
- · Rock walls

Substrate **preparation**

The applicative surfaces must be clean, free from contamination or any loose or detached parts, dust, water-repellent treatments in general, and so on, being suitably watered down until it is "saturated with a dry surface". It is always advisable to prime the application support with approximately 100-150~g / m2 of COMPONENT B adhesive latex; in this way, at least three extraordinarily effective operations are carried out with a simple and fast priming: a) expulsion of the air from the surface porosity _ stopper (with a drastic reduction of the well-known blistering that occurs on elastic products with low thickness); b) decrease in the absorption of the support (to guarantee a suitable curing of the waterproof skim coat); c) increased adhesion thanks to the deep penetration of the polymeric component.

Instructions for use

Mix the powder (component A) with the hydrating solution (component B) using a drill at low-speed or other effective mechanical mixer, gradually adding the powder to the liquid.

Continue mixing until reaching a homogeneous and lump-free mixture.

After mixing, wait a few minutes then stir again before applying.

To further improve the effects of the coating (for example, when waterproofing terraces and balconies), it is advisable to add the ARMAGLASS 160 alkaline-resistant fibreglass reinforcing mesh between one layer and the next, for a consumption of around 3-4 kg/m2 as a guideline. Do not apply in the presence of direct insolation or when dealing with wet curing and protection.

Do not apply to substrates with little to no porosity or those previously coated with water-repellent treatments generally, except whereby following proper roughening by means of bush hammering machines, sanders or equipment suitable for preparatory surface treatment or specific treatment with suitable polymer primers.

Storage and preservation

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.



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Warnings, Precautions and **Ecology**

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.

OSMOCEM iTOP is produced/distributed by



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