

# Osmocem D

## Osmotic deformable two-component waterproofing cement



A two-component osmotic cementitious waterproofing in water dispersion, a modified polymer that is super adhesive, breathable and moderately deformable, being resistant to positive and negative thrusts. Application by trowel, brush or roller. Ideal for waterproofing reinforced concrete and masonry structures including tanks, water pipes, underground structures, lift shafts, flower boxes and hanging gardens. It also serves for repairs and protective coatings of structures offshore or those exposed to sea salt. Suitable for contact with drinking water.

**CUSTOMS CODE:** 3824 5090

**COMPONENTS:** Two-components

**APPEARANCE:** Powder + Liquid

**AVAILABLE COLORS:** White / Gray

**PACKAGING AND DIMENSIONS:** Bag 25 kg [A] - Plastic can 6.5 kg [B] - Kit: 1 Bag 25 kg [A] + 1 Plastic can 6.5 kg [B]

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

Osmocem D is extremely easy to apply, error-proof. It induces adherence to supports by mechanical adhesion and osmotic diffusion. It is also effective in terms of negative hydrostatic thrust (negative pressure). Osmocem D is compatible with food substances: it has been certified as suitable for the containment of foodstuffs and drinking water (Certificate no. 03/2010 Laboratorio Analysis Service di Settimo di Pescantina - VR). Ivory color available on request.

## FIELDS OF APPLICATION

Waterproofing treatments of underground structures and masonry, pools, tanks, pipes, tunnels, garages, bridges, reservoirs, basements, areas containing food, etc., provided they are sufficiently porous and absorbent and free from any waterproofing and / or water-repellent surface treatment, whether chemical (siloxanes, epoxies, polyurethanes, etc.) or natural (wax-up). Suitable in both positive or negative hydrostatic thrust conditions. It can also be used for waterproofing terraces and balconies.

## ALLOWED SUPPORTS

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



## PREPARATION OF SUPPORTS

Application surfaces should be clean, free of soiling, crumbling and non-adhering parts, dust, etc., water repellent treatments in general, etc. conveniently saturated with water until they reach the condition "saturated with dry surface". It is always advisable to prime the application support with approximately 100-150 g / m<sup>2</sup> 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.

## MODE OF USE

Mix the powder component (component A) with the hydrating solution (component B) with a drill at a low number of revolutions, pouring the powder progressively in the liquid, continue mixing until a homogeneous lump-free mixture is obtained. Moderate variations in the amount of component B in the mix are allowed, to obtain a more or less fluid compound depending on the intended use (for example, if applied with a brush more component B is required compared to as usage as easy to spread plaster). After mixing is completed wait a few minutes and stir again before proceeding with the application. Mix at a ratio of 25 kg of component A with 5.2 litres of component B. To further to improve the performance of the coating (for example in the case of waterproofing of terraces and balconies), insert the alkaline-resistant fibreglass reinforcing mesh Armaglass 160 between layers, for a general consumption of about 5 kg/m<sup>2</sup>.












## APPLICATION METHODS

Plastering machine - Brush - Spatula - Sprayer

## TOOL CLEANING

Water

## KEY FEATURES

- |                                                                                                                          |                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|  Density: 1.9 kg/dm <sup>3</sup>       |  Max. recommended thickness: 8 mm         |
|  Maximum diameter of aggregate: 0.6 mm |  Min. recommended thickness: 1.5 mm       |
|  Nonflammable                          |  Pot-life: 50-70 min                      |
|  Shelf-life: 12 months                 |  Suitable for contact with drinking water |
|  Temperature of use: +5 / +35 °C       |  To be applied in two coats               |
|  UV-resistant                          |                                                                                                                              |



## TECHNICAL SPECIFICATIONS

EN 12190

Compressive strength > **30 N/mm<sup>2</sup>**

UNI PdR 88:2020

Total recycled content ≥ **4.1 %**

UNI EN 12390-8

Water penetration under pressure (5 bar for 72 hours) ≤ **13 mm**

Sd EN ISO 7783-1

Permeability to water vapor **CLASS I**

EN 13142

Static elastic modulus **15 GPa**

UNI EN 1062-3

Capillary absorption **0.16 kg•h<sup>0.5</sup>/m<sup>2</sup>**

EN 12190

Flexural strength ≥ **6 N/mm<sup>2</sup>**

UNI EN 1015-12

Bonding force ≥ **1.5 N/mm<sup>2</sup>**

Darcy impermeability **10<sup>-10</sup> cm/s**

Setting time **12-16 h**

Walkability **36-48 h**

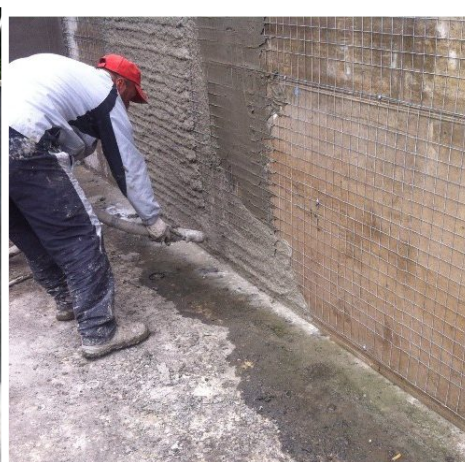
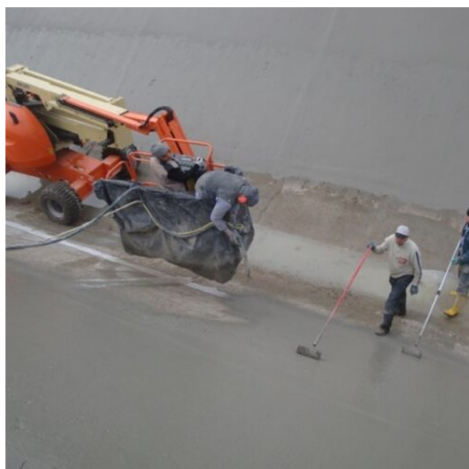
## CONSUMPTION

Approximately 1.9 kg/m<sup>2</sup> of Osmocem D for each millimetre of thickness to be made.

## 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



## WARNINGS AND PRECAUTIONS

Do not apply in case of direct exposure to sunlight and cure the protection and moist hardening.

Do not apply on little or non-porous substrates or previously coated with water-repellent treatments in general, if not after appropriate roughening by bush hammers, sanders and equipment suitable for preparatory treatments of substrates, or after appropriate treatment with suitable polymeric primers. 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.

