



OSM.0263

## OSMOCEM SCK

Osmotic waterproofing mortar,  
with active crystalline agents

### Customs Code

3824 5090

### Packaging

- Bag 25 kg

### Application

- Brick trowel
- Finishing trowel
- Shotcrete machine
- Spatula
- Low pressure airless nebulize

Family  
**Osmocem**

Product Lines

- Aqua
- Infratech

Type

**Osmotic one-component cement compounds**

Functional Categories

- **Osmotic waterproofing**
- **Structural maintenance of dams, reservoirs, ducts and water ducts**
- **Structural maintenance of tunnels**
- **Construction of underground works in high performance waterproof concrete**
- **Waterproofing chemical-resistant coating of sewing and digesters**

Components  
**Single-component**

Appearance

**Powder**

## Certifications and legislations



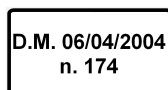
**EN 998-1**

Specification for Mortar for Masonry - General purpose rendering/plastering mortar (GP)



**EN 1504-3**

Products and systems for the protection and repair of concrete structures - Structural and non-structural repair (R4)



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

Regolamento concernente i materiali e gli oggetti che possono essere utilizzati negli impianti fissi di captazione, trattamento, adduzione e distribuzione delle acque destinate al consumo umano.

## General description

Fiber-reinforced monocomponent cement mortar, based on hydraulic binders, superprogoline fillers, selected fine aggregates and crystallizing reagent agents, which favor the penetration of the compound into the support. Ideal for low-thickness protective coatings (4 to 10 mm), with high counterweight adhesion. The specific formulation makes this product ideal for coatings in aggressive environments in contact with chlorides and sulphates (sewage systems).

## General features

OSMOCEM SCK has a rapid hardening even at low temperatures (even close to 0 ° C), excellent resistance to freeze-thaw cycles and a remarkable resistance to hydrostatic pressure, even in negative phase (counter-thrust). Thanks to the particular crystallising agent of which it is added, it also has a strong tendency to self-healing in case of cracks, as well as a very high cohesion to the support due to its penetrating characteristic (osmotic crystallising).

## Dosage

Approximately 1.7 kg/m<sup>2</sup> of OSMOCEM SCK for each millimetre of thickness to be made.

## Fields of application

Concerning concrete counter-ground works, underground rooms and constructions, tunnels, hydraulic and infrastructural works and sewer systems, the OSMOCEM SCK compound is ideal for low-speed regularisations, shavings and coatings, 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). Resistant to both positive and negative thrust impermeabilizations (counter-thrust).



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## Basic features



Density:  
1.9 kg/dm<sup>3</sup>



Maximum diameter of aggregate:  
2.0 mm



Mix with water:  
16-18 %



Pot-life:  
45 min



Suitable for contact with drinking water



Max. recommended thickness:  
10 mm



Min. recommended thickness:  
4 mm



Nonflammable



Shelf-life:  
12 months



Available **colours**  
Gray

## Technical specifications

*Adhesion to substrate:* 2.2 N/mm<sup>2</sup>

*Bonding force (UNI EN 1015-12):* 2.2 N/mm<sup>2</sup>

*Capillary absorption:* 0.17 kg•h<sup>0.5</sup>/m<sup>2</sup>

*Chloride content:* <0.01 %

*Compressive strength after 28 days (UNI EN 1015-11):* > 50 N/mm<sup>2</sup>

*Darcy impermeability:* <1x10<sup>-10</sup> cm/s

*Flexural strength (UNI EN 1015-11):* > 6 N/mm<sup>2</sup>

*Resistance to severe chemical attacks (UNI EN 13529):* classe II \_

*Resistant to chemical agents*

*Resistant to sulphates pH:* 4.5 \_

*Skid resistance (UNI EN 13036-4):* 65.0 \_

*Static elastic modulus (EN 13412):* > 21000 N/mm<sup>2</sup>

*Thermal compatibility (UNI EN 13687-1):* 2.18 MPa

*Water penetration after capillary absorption (UNI EN 1015-18):*

*Water penetration depth (UNI EN 12390-8):* 40 mm

## Tools cleansing

- Water

## Applicable on

- Concrete
- Prefabricated concrete
- Bricks
- Mixed walls (bricks and stones)
- Brickworks
- Stone walls
- Rock walls

## Substrate preparation

The surfaces that are the subject of the operation should be healthy, compact and clean. Carefully remove dirt and any pollutant by removing the layers that are not tight, labile and not adequately resistant. Application surfaces should be abundantly and homogeneously moistened before application, while avoiding water stagnation on the surface.

## Instructions for use

To prepare the prepared mortar, add about 2/3 of the expected dough water to the mixer, gradually add the contents of the OSMOCHEM SCK bag and finally the remaining water; Extend the mixing until a homogeneous, bulk-free mix is obtained. When mixing is completed, wait a few minutes before applying. It can be applied either manually (trowel and broom) or by specific pumping equipment, with spritz-concrete, even sprayed technique. In the case of tunnel and tunnel impermeabilizations, OSMOCHEM SCK mortar can be used as a waterproofing layer between two containment spritz-concrete.



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## Storage and preservation

Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity.



## Warnings, Precautions and Ecology

Technical and performance data outlined in this document are the result of laboratory testing conducted in a conditioned environment, as such they can result as considerably changed from operating and application conditions. The need follows to carry out preliminary tests in actual use conditions.

The user is required to check the product's most recent Material Safety Data Sheet, reporting physical-chemical and toxicological data, risk phrases and other useful information on how to safely transport, use and dispose of the product and its packaging. It is also reminded that the product and its packaging must not be dispersed in the environment for any reason.

Do not apply in case of direct exposure to sunlight and excessive direct ventilation. Protect the fresh (applied) mortar during hardening/curing period from excessive and rapid loss of humidity and from sudden temperature change.

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.

*OSMOCEM SCK is produced/distributed by*



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