

Osmocem N

Mono-component, osmotic, rigid waterproofing cement



Cement compound for the preparation, with the sole addition of water, of a waterproofing osmotic coating that can create horizontal and vertical barriers, also suitable in conditions of negative hydrostatic thrust vis-à-vis water permeation in the buildings. Typical uses include waterproofing underground rooms, elevator compartments, garages, basements, tanks, etc.

CUSTOMS CODE: 3824 5090

COMPONENTS: Single-component

APPEARANCE: Powder

AVAILABLE COLORS: White / Gray

PACKAGING AND DIMENSIONS: Bag 25 kg

OBTAINED CERTIFICATIONS AND REGULATIONS



FEATURES AND BENEFITS

The action of the active components and of the adhesion promoters of Osmocem N, saturated by the reaction the support capillaries, forming a complex system of gel and stable crystals, which results in the best sealing, effective even in conditions of negative hydrostatic thrust, without hindering the breathability of the walls. Osmocem N is compatible for food substances: is certified as suitable for the containment of foodstuffs and drinking water (Certificate no. 02/2010 Laboratorio Analysis Service di Settimo di Pescantina - VR).
Osmocem N waterproof test: • Resistance to positive hydraulic thrust, UNI EN 12390/8: water penetration depth with 5 bar pressure = 1-2 mm (*) • Impermeability to negative hydraulic thrust, UNI EN 12390/8 modified (concrete support a / c ratio 0.7): no passage of water with a pressure of 1.5 bar (*) concrete with penetration depth ≤ 20 mm are considered waterproof

FIELDS OF APPLICATION

Waterproofing rigid structures and masonry walls underground, buried or in any case subject to water permeation: lift wells, basements, tanks, pipes, tunnels, garages, bridges, reservoirs, areas containing food, etc. in conditions of positive and negative hydrostatic thrust 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).

ALLOWED SUPPORTS

Concrete - Prefabricated concrete - Fiber-cement - Bricks - Mixed walls (bricks and stones) - Stone walls - 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".

MODE OF USE

Pour about 2/3 of the mixing water into the mixer, add Osmocem N and the remaining water; continue to mix until a homogeneous lump-free mixture is obtained. The mixing water should be about 19-20% (for interventions in the form of a spatula) or 21-22% (for interventions using a brush with long bristles). After mixing is completed wait a few minutes before applying. If applied by brush, roll out two or more crossed coats. Although it is not a specific product for finishing thick coats, it can still be used for these purposes. In these cases, it is appropriate to use a fibreglass mesh Armaglass 160.

APPLICATION METHODS

Finishing trowel - Plastering machine - Brush - Spatula - Sprayer

TOOL CLEANING

Water

KEY FEATURES

↔ Max. recommended thickness: 5 mm

↔ Min. recommended thickness: 1 mm

⌚ Pot-life: 60 min

🚰 Suitable for contact with drinking water

🏠 To be applied in two coats

⊘ Maximum diameter of aggregate: 0.6 mm

🌀 Mix with water: 19-22 %

🕒 Shelf-life: 12 months

🌡 Temperature of use: +5 / +35 °C

TECHNICAL SPECIFICATIONS

UNI EN 1015-11

Compressive strength at 2 days > **20 N/mm²**

UNI EN 1015-11

Compressive strength after 7 days > **30 N/mm²**

UNI EN 1015-18

Capillary absorption **0.08 kg·h^{1/2}/m²**

UNI EN 1015-12

Bonding force **1.8 N/mm²**

Sd EN ISO 7783-1

Permeability to water vapor **CLASS i**

UNI EN 1015-6

Density **1930 kg/m³**

UNI EN 1015-11

Compressive strength after 28 days > **40 N/mm²**

UNI EN 196/1

Flexural strength after 28 days > **8 N/mm²**

Waterproof to negative hydraulic thrust with a pressure of 1.5 bar

UNI EN 12390-8

Water penetration under pressure (5 bar for 72 hours) ≤ **20 mm**

Vicat EN 196/3

Setting time **3 h**

CONSUMPTION

Approximately 1.7 kg/m² of Osmocem N for each millimetre of thickness to be made.



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Update of **03-10-2023**
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<https://www.azichem.com/general-sales-conditions>
Total pages of this document: 4

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



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WARNINGS AND PRECAUTIONS

It is always essential to carry out preliminary tests to verify the appropriateness of the product, depending on specific requirements.

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. 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.

