



Rev 1
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GRAUTEK OSMOTICO

Hydraulic binder-based mineral protective suitably formulated to have osmotic, waterproofing and breathable properties



DESCRIPTION

GRAUTEK OSMOTIC is a product formulated to waterproof masonry, manufactured goods and concrete structures. Thanks to its special formulation, it ensures the escape of moisture by preventing the entry of water, while at the same time waterproofing surfaces. It is used to achieve waterproofing of exterior and interior surfaces and artifacts subject to slight hydrostatic counterthrust.

FEATURES

The ready-to-use formulation of GRAUTEK OSMOTIC also allows greater workability of the mixture, high adhesion to the substrate even in the presence of counterthrust water. GRAUTEK OSMOTIC, due to its special composition, captures and reacts with free lime, filling the voids present in the cement paste, this allows to close all porosity, forming a water-resistant barrier that simultaneously allows the evaporation of moisture. The speed of osmotic restoration depends on the absorption of the concrete and the amount of lime released.

FIELDS OF USE

GRAUTEK OSMOTIC finds its main applications in all concretes and masonry:

- to be rehabilitated, subject to water infiltration and moisture;
- to be waterproofed, even in the presence of hydrostatic pressure (positive or negative)
- buried structures such as: foundation walls, basements, channels, manholes, elevator shafts, counter-ground walls, etc.

Do not use the product on:

- on substrates that have standing water
- flexible surfaces,
- plasterboard, plasters and gypsum,
- painted walls, wooden walls,
- asbestos cement.

SUBSTRATE PREPARATION

Make the substrate sound, compact, without crumbly and oily parts, by sandblasting or hydro-washing, so that the product can adhere perfectly.

If applied on degraded substrates, repair first with mortars from the GRAUTEK line.

APPLICATION

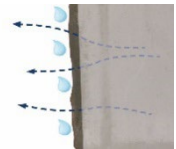
GRAUTEK OSMOTIC mixed with water generates a fluid mortar that can be applied by brush, spray or trowel after saturating the surface with water.

Mix with a low-speed whip drill a 25-kg bag with:

- 5-6 lt clean water (for a mortar of trowelable consistency);
- 7-8 lt of clean water (for a mortar applicable by spray or brush).

Mix until the mixture is completely homogeneous in the absence of lumps.

PRODUCT
FOR PROFESSIONAL USE



TECHNICAL DATA SHEET



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It is recommended to make a preliminary coat by brush or roller and proceed after 3-4 hours to the second coat by roller or spray or possibly by trowel to give more thickness.

Brush application requires 2-3 coats.

Do not dilute with more water than described. Do not use the product if the bag was already open or damaged.

Moist curing is very important, so during the curing phase it is a good idea to spray water or use our TEKNAPUR 31 anti-evaporating agent, especially if the product is applied in ventilated or sunny environments.

PHYSICAL PROPERTIES

Physical state	powder
Color	gray
Particle size distribution	0-400 μ m
Pile density	1.29 \pm 0.03 kg/dm ³
Mortar density	1.74 \pm 0.03 kg/dm ³
pH	\geq 12
Minimum thickness	\geq 2 mm
Maximum thickness	\leq 10 mm
Maximum thickness per layer	approx. 3 mm
Application temperature	+5°C to +35°C
Working temperature	-30°C to +90°C
Next coat application	after 3-4 h but not more than 24h
Total waterproofing	after 7 days after proper application and curing

FINAL PERFORMANCE

Performance	Test	Results EN 1504-2	Performance GRAUTEK OSMOTICO
Compressive strength (MPa)	EN 196/1	NOT REQUIRED	1 day > 10 20 days > 30
Flexural strength (MPa)	EN 196/1	NOT REQUIRED	1 day > 3 28 days > 8
Support adhesion (MPa)	EN 1542	For rigid systems Without traffic \geq 1 With traffic \geq 2	\geq 2 (after 28 days)
Impermeability (expressed as coeff. of free water permeability)	EN 1062-3	W < 0,1	W < 0,03

CONSUMPTION

Approximately 1.5-2 kg/m² per mm thickness, depending on the porosity of the substrate.

For minor infiltration: 2-3 kg/m²

For structures in continuous presence of water: 4-5 kg/m²

For water under pressure up to 1 atm: 6-7 kg/m²

PACKAGING

GRAUTEK OSMOTIC comes in 25 kg bags.

STORAGE AND PRESERVATION

GRAUTEK OSMOTIC in its original packaging and properly stored under cover in a dry place, retains its characteristics for one year at temperatures between +5°C and +35°C.

Moisture that may be adsorbed by the product impairs the effectiveness of the product: therefore, it is not recommended to use the product if open or broken bag.





WARNINGS

Use full protective clothing.

However, it is easily removed with soap and water from any surface.

In case of accidental spillage it should be collected in a dry state and disposed of in an authorized landfill.

LEGAL NOTES

The information contained in this data sheet, while representing the most advanced stage of knowledge, does not exempt the user from performing accurate preliminary tests under his own conditions of use and operation. Any liability for improper use of the product is therefore disclaimed.

