

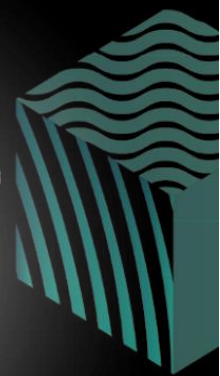
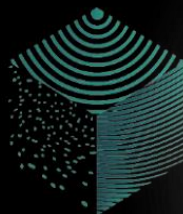
DRYKOTE



 **DRYKOS**

CRYSTALLINE PENETRATING TREATMENT FOR CONCRETE WATERPROOFING

**CHLORIDE-FREE
COMPLIANT WITH EN 1504-2 STANDARD**



PRODUCT DESCRIPTION

DRYKOTE is a one-component cement-based product with advanced crystalline technology. It includes water-soluble additives and hydraulic binders, purposefully designed for rehabilitating and waterproofing concrete structures. Applied as a slurry on the concrete surface, it allows the components to penetrate and deliver waterproofing, rehabilitation, and protection. This crystalline process forms insoluble complexes that permanently seal capillary pores, effectively preventing water and moisture penetration from any direction. Additionally, this crystallization can reactivate over time when exposed to new water or moisture.

FEATURES AND ADVANTAGES

- Particularly suitable for degraded or old concrete
- Can be applied from both the positive and negative sides relative to isostatic pressure and can withstand high pressures after application
- Permanent waterproofing
- High resistance to chemical aggressions (between pH 3 and 11)
- Heals micro cracks up to 0.5 mm in the presence of water or moisture
- Allows the passage of water vapour
- Enables waterproofing interventions with a rapid drying effect
- Enhances the durability
- Does not contain resins or elastomeric products
- Certified for use with potable water

GREEN TECHNOLOGY

Drykote is an eco-friendly product that uses cement chemistry to perform its function, thus allowing for future recycling and avoiding the use of any external layer or coating materials that would require a high disposal cost.

AREAS OF APPLICATION

- Concrete water tanks and reservoirs
- Concrete basins
- Wastewater treatment plants
- Concrete pipelines
- Swimming pools
- Roof slabs
- Elevator shafts
- Water-infiltrated underground structures
- Tunnels and subways

SURFACE PREPARATION

The concrete surface must be cleaned before application through high-pressure water cleaning. Any areas contaminated with oils, fuels, grease, or pre-treatment layers must be cleaned before application with suitable products. Any loose parts should be repaired with appropriate mortars. The substrate must be fully saturated with clean water and allowed to dry until the surface remains damp. Excess water on stagnant areas should be removed before applying the product.

PREPARATION PRODUCT

Mix the product with clean water evenly to obtain the desired consistency (slurry) without lumps. Mix 25 kg of product in 8/8.75 liters of clean low-speed water. Let the obtained slurry rest for 2/3 minutes. Do not mix more material than can be applied in 20 minutes.

CONSUMPTION

For brush application: 0.8 kg/m² in two coats

For spray application: 0.7-0.8 kg/m² in two coats (the ratio may vary slightly depending on the type of machine used).

APPLICATION

DRYKOTE can be applied with a rough brush or a professional spray machine. Before application, the substrate must be fully saturated with clean water and allowed to dry until the surface remains damp. Excess water on stagnant areas should be removed before applying the product. In very hot climates, spray water on the surface even during product application.

The application should consist of two coats in a cross pattern. Apply the second coat perpendicularly to the first, such as the first coat vertically and the second coat horizontally. The second coat should be applied within approximately 6 hours of the first coat, ensuring it's not completely dry. Following application, protect the freshly coated DRYKOTE surface from rain and frost for a minimum of 48 hours to prevent washout.

POST APPLICATION TREATMENT

After applying DRYKOTE, it's important to spray a fine mist of clean water onto the treated surface to facilitate the product's penetration into the substrate. This nebulization process should be repeated 3 to 4 times daily for a duration of 3 days. In regions with high temperatures, it may be necessary to increase the frequency of nebulization. It's essential to wait for a minimum of 18 days before allowing the treated surface to come into contact with liquids in tanks or pools.

LIMITATIONS

Do not apply DRYKOTE ULTRA in rainy conditions or when the ambient temperature is below 4°C. If you are applying the product outdoors and it starts to rain, suspend the application.

WARNINGS

- Do not apply DRYKOTE ULTRA on loose, weak, or fractured substrates.
- Do not apply the product on dry surfaces, as it would prevent the product components from penetrating and developing crystalline formation in depth.
- For effective waterproofing, the concrete thickness must be greater than 8 cm.
- Do not add water after the prepared mixture begins to harden.

HEALTH AND SAFETY

DRYKOTE contains chemicals that can cause skin irritations. It is recommended to use gloves and goggles when handling the product and follow precautions for chemical handling. For further and complete information regarding safe product usage, consult the Safety Data Sheet.

STORAGE

The product must be stored in dry places and kept in its sealed packaging. The product must be used within 12 months from the manufacturing date.

PACKAGING

The product is available in 25 kg buckets.

Test description	Test Methods	Requirements in accordance with EN 1504-2	DRYKOTE
Compressive Strength	UNI EN 12190	≥ 25 Mpa (after 28 days)	28,2 Mpa
Adhesion Strength	UNI EN 1542	$\geq 1,5$ Mpa	1,9 Mpa
Chloride ion content	UNI EN 1542	$\leq 0,05\%$	$\leq 0,05\%$
Elastic module	UNI EN 13412	≥ 15 Gpa	28,5 Gpa
Thermal compatibility	UNI EN 13687-4	Bond strength after 30 cycles $\geq 1,5$ Mpa	1,8 Mpa
Capillary absorption	UNI EN 13057	$\leq 0,50 \text{ kg}\cdot\text{m}^{-2}\cdot\text{h}^{-0,5}$	$\leq 0,23 \text{ kg}\cdot\text{m}^{-2}\cdot\text{h}^{-0,5}$
Fire resistance	UNI EN 13501-1	Euroclass	A1
Test description	Test Methods	Test requirements	DRYKOTE
Water Permeability Test	UNI EN 12390-8	No requirement	More than 50% reduction in penetration compared to untreated sample
Potability test	D.Lgs.31-2001	Compliance with chemical parameters	Eligible
Rapid Chloride Penetration Test	ASTM 1202-08	comparison of values	Reduction of penetration by 70% compared to the mixture without additives
High pressure water permeability	U.S. Army CRD C48-92	Performance verification	High water resistance and self-sealing properties

