

DRYSEAL ULTRA

DEEP PENETRATING WATER BASED CRYSTALLINE LIQUID FOR WATERPROOFING AND PROTECTING CONCRETE REPELLENT, READY TO USE, CHLORIDE FREE COMPLIANT WITH EN 1504-2 STANDARD



PRODUCT DESCRIPTION

Dryseal Ultra is a multifunctional water-based product that combines crystalline and repellent technologies. Its protective properties stem from three chemical principles, incorporating repellent technology, impregnating technology (hydrated crystals), and deep-penetration waterproofing technologies (hygroscopic crystals).

Thanks to its low viscosity, DRYSEAL ULTRA effortlessly penetrates the concrete pores and capillaries. Through a chemical reaction with moisture and the by-products of concrete hydration, it establishes a remarkable protective system. This system comprises a dense crystalline formation that repels, along with two crystalline formations that deeply penetrate and seal the top layer of the concrete. This comprehensive approach delivers profound waterproofing, restores the concrete, and significantly enhances its durability. The durability depends on both the external and microstructural properties of the concrete, such as porosity and pore size. These factors can significantly affect the concrete's resistance to the penetration of aggressive gases and liquids, ultimately impacting its long-term integrity.

A single application is sufficient to form an internal, non-film-forming barrier that waterproofs the concrete, protecting it from water penetration, aggressive chemical agents such as sulfates, chlorides, CO₂, alkali-silica reaction (ASR), and freeze-thaw cycle. DRYSEAL ULTRA reactivates within the concrete whenever there is new moisture present, ensuring a continuous protective mechanism.

FEATURES AND ADVANTAGES

- It is water-repellent, resistant to fuels, oils, and chemical agents.
- It waterproofs from any direction (both positive and negative).
- It is permanent and always active.
- It withstands pH levels from 3 to 11 on continuous contact.
- It has high resistance to chloride ion penetration and sulfates.
- It enhances the durability of concrete structures in highly aggressive environments such as marine, wastewater treatment, and when de-icing salts are used.
- It functions as an anti-dust agent.
- It does not alter the appearance of the substrate.
- It improves resistance to freeze-thaw cycles.
- It seals cracks up to 0.5 mm in width.
- It prevents the growth of moss, algae, and other types of vegetation.
- It is water-based, non-toxic, and completely safe for the environment.
- It does not contain VOCs and is REACH certified. It is certified for use with potable water.

GREEN TECHNOLOGY

Drykote Ultra 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. The use of DRYSEAL ULTRA by Drykos therefore contributes to acquiring LEED credits.

AREAS OF APPLICATION

- Infrastructure
- Bridges, viaducts
- Tunnels
- Dams
- Marine structures
- Ports and docks
- Wastewater treatment plants
- Sewage systems
- Concrete protection in chemically aggressive environments

- Interior and exterior concrete pavements
- Urban furniture elements
- Architectural concrete (face concrete)

SURFACE PREPARATION

Brush the surface that needs to be treated and use compressed air to remove dust and any loose particles. Subsequently, clean the surface with a pressure washer and apply DRYSEAL ULTRA when it is dry.

PRODUCT PREPARATION

Shake the DRYSEAL ULTRA container to eliminate any product deposits. DRYSEAL ULTRA is supplied ready for use and should not be diluted.

DOSAGE

It is recommended to apply DRYSEAL ULTRA in a dosage of 1 liter per 5 square meters.

APPLICATION

DRYSEAL should be applied in a single, uniform pass, either by spraying or roller. For large surfaces, a low-pressure sprayer is recommended. The entire surface should be covered with the product.

AFTER-APPLICATION TREATMENT

The concrete surface treated with DRYSEAL should dry for 1 hour at around 24°C before use; at lower temperatures, it may require an additional 1-2 hours. It is essential to wait 7 days before filling tanks or pools with water.

LIMITATIONS

DRYSEAL should not be applied if the surface temperature drops below 5°C. The concrete on which the product is applied must be at least 7 days old.

EFFECTS AFTER THE APPLICATION

The concrete treated with DRYSEAL ULTRA may darken immediately after application but will return to normal as the product dries. If excess product is sprayed, white powder may form as the surface dries; in this case, simply wash the surface with water to remove the white powder.

WARNINGS

Do not apply DRYSEAL ULTRA outdoors if rain is expected within 2 hours; if applying the product outdoors and it begins to rain, suspend the application. Wait for the surface to dry before resuming work. Do not reapply on already treated areas.

HEALTH AND SAFETY

DRYSEAL ULTRA contains chemicals that may cause skin irritation. It is recommended to use gloves, goggles, and a mask when applying the product and follow precautions for handling chemical products. For further and comprehensive information regarding safe product usage, consult the Safety Data Sheet.

STORAGE

DRYSEAL should be stored at room temperature. Cold temperatures could cause crystallization of the product; in such cases, simply shake it and bring it to a warmer environment. Store it in its sealed container and use it within 12 months. The product must not freeze, as this could cause damage.

WARRANTY

If the product is found to be defective, Drykos's liability is limited to replacing the product itself. As Drykos has no control over the user's application of the product, it is the user's responsibility to ensure that the product corresponds to its intended use, assuming all risks and responsibilities in this regard.

PACKAGING

The product is available in 25 liter can and 1,000 liter IBC

TECHNICAL DATA

Performance features	Test methods	Requirements in accordance with EN 1504-2	DRYSEAL ULTRA
Resistance to freeze-thaw cycles	UNI EN 13581	Volume loss after 20 cycles	After 25 cycles
Water absorption and resistance against alkalis	UNI EN 13580	Water absorption < 7,5% Resistance to alkalis < 10%	Water absorption 3,5% Resistance to alkalis 6,6%
Penetration depth	UNI EN 14630	Classe 1: < 10 mm Classe 2: ≥ 10 mm	Classe 2: 17,8 mm
Drying speed	UNI EN 13579	Classe 1: > 30% Classe 2: > 10%	Classe 1: 38,1 %
Fire resistance	UNI EN 13501-1	Euroclass	A1
Water Permeability Test	UNI EN 12390-8	No requirements	56 % reduction compared to concrete without additives (*)
Potability test	D.Lgs.31-2001	Compliance with chemical parameters	Eligible
Rapid chloride penetration Test	ASTM 1202-08	Euroclasse	110% increase compared to the mixture without additives

