DRYKOS

DRYSEAL

DEEP PENETRATING CRYSTALLINE LIQUID FOR WATERPROOFING CONCRETE

READY TO USE - CHLORIDE-FREE COMPLIANT WITH EN NORM EN 1504-2





PRODUCT DESCRIPTION

DRYSEAL is a single-component, water-based liquid waterproofing agent with crystallising action which, through a superficial spray application, penetrates deep into concrete and cement matrix substrates, restoring them from dampness, sealing any damp cracks up to 0.4/0.5 mm. and protecting concrete from chemical aggression.

The product penetrates into the pores of the concrete and, by reacting chemically with the moisture and hydration by-products of the cement, develops a needle-like crystalline formation that seals pores and micro-cracks, restoring the substrate in depth and increasing the durability of the concrete mix. The latter depends significantly on the porosity of the conglomerate through which aggressive gases and liquids can penetrate. The considerable decrease in permeability of the cement system induced by DRYSEAL results in a significant improvement in the material's resistance to chemical aggression and freeze-thaw cycles.

A single application is sufficient for the product to perform its healing and waterproofing action.

DRYSEAL is reactivated whenever new moisture phenomena occur, creating a continuous protection mechanism.

The application of a first coat of DRYSEAL and a second coat of DRYSEAL ULTRA forms a complete protection system which adds to the characteristics of DRYSEAL the total cortical sealing of the pores and the surface repellency generated by DRYSEAL ULTRA, increasing the life of the concrete and delaying maintenance work.

FEATURES AND ADVANTAGES

- Provides deep waterproofing within concrete mass: The product's high penetration capacity, combined with moisture presence, triggers the formation of crystalline structures.
- Waterproofs from any direction (both positive and negative sides).
- Permanent and always active.
- High resistance to chloride ion penetration (marine environments or de-icing salts).
- Does not alter the substrate's appearance.
- Improves resistance to freeze-thaw cycles.
- Seals cracks up to 0.5mm.
- Allows for water vapor transmission.
- Does not contain resins or elastomeric products.
- Water-based, non-toxic, and environmentally safe.
- Certified for use with potable water.

GREEN TECHNOLOGY

Dryseal 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 derived by petroleum, that would require a high disposal cost in future.

AREAS OF APPLICATION

- Tunnels and underpasses.
- Roof decks.
- Water treatment plants.
- Tanks, pools, and foundations.
- Wastewater treatment facilities.
- Sewer systems.
- Multi-story parking structures.



- Bridges and viaducts.
- Ports and docks.
- Marine structures.

SURFACE PREPARATION

The concrete surface must be thoroughly cleaned before applying the product. It is recommended to brush the surface and use compressed air to remove dust and loose particles. Subsequently, wash the surface with a pressure washer. If there are areas contaminated with oil, fuel, grease, or pre-treatment layers, they must be cleaned prior to application using suitable products. If no moisture is present from the negative side or the floors are not in contact with the ground, it is recommended to saturate the surfaces with water, and excess water should be removed 24 hours before applying the product.

PRODUCT PREPARATION

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

DOSAGE

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

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.

EFFECT AFTER APPLICATION

The concrete treated with DRYSEAL 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 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 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 cans.

TECHNICAL DATA

Test description	Test methods	Requirements in accordance with EN 1504-2	DRYSEAL
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	Class 1: < 10 mm Class 2: ≥ 10 mm	Class 2: 17,8 mm
Drying speed	UNI EN 13579	Class 1: > 30% Class 2: > 10%	Class 1: 38,1 %
Water Permeability Test	UNI EN 12390-8	No minimum requirement	43% reduction of penetration compared to concrete without additive
Potability test	D.Lgs.31-2001	Compliance with chemical parameters	Compliant
Rapid chloride penetration Test	ASTM 1202-08	Comparison of values	53% increase compared to the mixture without additives



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