



## Dryseal Ultra

Single-component, water-repellent, ready-to-use, high-penetration crystallizing waterproofing agent for cementitious substrates

Drykos® **Dryseal Ultra** is a water-based multifunctional treatment with crystallizing and water-repellent action, designed for the protection and waterproofing of concrete.

The product combines three integrated chemical technologies: surface repellent technology, impregnating technology with hydrated crystal formation, and deep-penetration waterproofing technology using hygroscopic crystals.

Due to its low viscosity, Drykos® **Dryseal Ultra** penetrates the pores and capillaries of concrete and reacts chemically with the moisture present and with the by-products of cement hydration. This reaction generates a protective system composed of a dense cortical crystalline formation with repellent action and crystalline structures that develop in depth, sealing the cementitious matrix.

The result is the formation of an internal non-film barrier capable of waterproofing concrete in depth, improving its compactness, restoring micro-porosity, and increasing its durability.

A single application is sufficient to protect the structure from water penetration and aggressive chemical agents such as sulfates, chlorides, and CO<sub>2</sub>, also helping to counteract alkali-silica reaction (ASR) phenomena and freeze-thaw cycles.

Drykos® **Dryseal Ultra** maintains its effectiveness over time thanks to its ability to reactivate in the presence of new moisture within the concrete mass, activating a continuous and permanent protection mechanism.

## TECHNICAL PERFORMANCE

| Characteristic                                                           | Test method | Standard requirements                                                                                                              | Performance                                      |
|--------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Freeze-thaw cycles with immersion in de-icing salts                      | EN 13581    | Mass loss of the surface of the impregnated specimen must occur at least 20 cycles later than that of the non-impregnated specimen | 35 cycles later than the impregnated specimen    |
| Penetration depth                                                        | EN 14630    | Class I: < 10 mm   Class II: ≥ 10 mm                                                                                               | Class I: 3 mm                                    |
| Water absorption and alkali resistance test for hydrophobic impregnation | EN 13580    | Absorption ratio < 7.5%, compared to the untreated specimen   Absorption ratio (after immersion in an alkali solution) < 10%       | Water absorption: 4.9%   Alkali absorption: 8.5% |
| Drying rate for hydrophobic impregnation                                 | EN 13579    | Class I: > 30%                                                                                                                     | Class I: 151%                                    |
| Hazardous substances                                                     |             |                                                                                                                                    | Compliant with point 5.4                         |
| Water permeability under pressure                                        | EN 12390-8  | Comparison with non-admixed mixture                                                                                                | 56% reduction (5 bar/72 h)                       |

| Characteristic                                                         | Test method                                                                   | Standard requirements               | Performance                                                                 |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------|
| Rapid chloride permeability                                            | ASTM C1202                                                                    | Comparison with non-admixed mixture | Significant reduction in charge passed compared to reference concrete: -60% |
| Coating suitable for contact with water intended for human consumption | In accordance with Ministerial Decree 174/2004 and Legislative Decree 18/2023 |                                     | Suitable                                                                    |

## NOTES

This "light" version of the technical data sheet provides a selection of the product's main descriptive and performance characteristics. While the data contained herein corresponds to our current scientific and technical knowledge, it is indicative and not exhaustive. For complete specifications, detailed technical information, conditions of use, and official updates, please refer exclusively to the full technical data sheet, available in its latest revision at [www.drykos.com](http://www.drykos.com).

### Full technical datasheet

