



Drymix Ultra

Liquid crystalline admixture for integral waterproofing of concrete

Drykos® **Drymix Ultra** is a water-based liquid chemical admixture with crystalline action designed for integral waterproofing of concrete and to enhance its long-term durability.

The latter depends significantly on the microstructural properties of concrete, such as porosity and pore size, through which aggressive chemical agents that cause degradation can penetrate.

The active chemical components of Drykos® **Drymix Ultra** react with moisture and cement hydration by-products present in pores and capillaries, forming an insoluble crystalline complex that becomes an integral part of the cement matrix and acts as a waterproof barrier against water penetration from any direction.

Concrete treated with Drykos® **Drymix Ultra** also has self-healing properties: in the presence of water or moisture, the crystallization process reactivates over time, contributing to the closure of microcracks up to approximately 0.5 mm, further improving the durability of the structure.

Drykos® **Drymix Ultra** is compatible with all cements conforming to UNI EN 197 standard and with the main admixtures and additions commonly used in concrete production. Thanks to its application versatility, the product can be effectively used in ready-mixed concrete and precast applications.

CHARACTERISTICS

Drykos Technology

Drykos® crystallizing technology is distinguished by its efficiency through a chemical reaction with moisture and the by-products of cement hydration. This process generates, within the pores, capillaries, and cavities of the concrete, an insoluble crystalline complex that prevents water penetration. This complex becomes an integral part of the concrete mass, ensuring its resistance to water and aggressive chemical agents from any direction, promoting restoration and protection, imparting waterproof properties, and increasing its durability and service life.

Certifications



EN 934-2
Concrete additives



EN ISO 14025
Environmental labels and
declarations - Type III
environmental declarations



EN 15804
Sustainability of construction
works - Environmental product
declarations - Core rules for the
product category



POTABLE WATER
Coating suitable for contact with
water intended for human
consumption in accordance with
Ministerial Decree 174/2004 and
Legislative Decree 18/2023.



Main characteristics

- Integral waterproofing of the concrete mass
- Formation of insoluble crystals that seal capillary porosity
- Significant reduction in concrete permeability
- Self-healing action with crack closure up to approximately 0.5 mm
- Waterproofing from any direction (positive and negative pressure)
- High resistance to hydrostatic pressures
- Improvement of concrete durability
- Resistance to chemically aggressive environments with pH between 3 and 11
- Compatibility with main concrete admixtures
- Does not modify the rheological characteristics of fresh concrete
- Suitable for applications in contact with drinking water
- Possibility of automated dosing in batching plants to ensure product traceability

Fields of use

- Foundations and underground structures
- Multi-story car parks
- Concrete slabs and roofs
- Tanks and reservoirs for water containment
- Water treatment plants
- Swimming pools and water basins
- Marine structures and port works
- Submerged structural elements
- Tunnels, galleries, and underground pipelines
- Bridges, viaducts, and dams

Green Technology & LEED

The product has a verified Environmental Product Declaration (EPD), compliant with ISO 14025 and EN 15804 standards. It contributes to credits in LEED v4/v4.1 sustainability protocols, specifically the MR credit – Building Product Disclosure and Optimization (EPD), supporting the achievement of up to 2 total points. The product is also consistent with the requirements of the Minimum Environmental Criteria (CAM) for construction, promoting environmental transparency of materials and use in sustainable public procurement.

Download EPD Certificate



SPECIFICHE TECNICHE

Packaging

25 L canister

1000 L IBC container

Color

Colorless.

Appearance

Liquid.

Shelf life

12 months from production date.

Storage conditions

Store correctly in the original, sealed, intact packaging, protected from moisture and direct exposure to sunlight, at temperatures between +5°C and +35°C.

APPLICATION DATA

Theoretical consumption

1 L per 100 kg of binder

Coverage

Depending on the cement dosage per m³ of concrete.

Thinner

Water.

Application temperature

Minimum +4°C | Maximum +40°C

APPLICATION INFO

Application

Drykos® **Drymix Ultra** must be added to concrete during the mixing phase in the quantities specified by the design. The product can be introduced directly into the concrete mixer truck or into the batching plant pre-mixer. In general, it is recommended to add Drykos® **Drymix Ultra**, as with other admixtures, in the final portion of the mixing water.

The admixture can be added using automatic dosing systems connected to the batching plant or through manual dosing devices, always ensuring an adequate mixing phase to guarantee uniform distribution of the product in the concrete.

In the case of dosing directly on site, Drykos® **Drymix Ultra** must be poured into the loading chute of the concrete mixer truck while it is rotating and subsequently mixed for 7–10 minutes at maximum speed.

The recommended dosage is 1 liter of product per 100 kg of binder contained in the concrete.

Tool cleaning

Tools are cleaned with water immediately after use.



DRYKOS S.r.l.

Piazza Marconi n. 7 12100 - Tarantasca (CN) - Italia

Tel. + 39 0171 1874992 | E-mail info@drykos.com | Web www.drykos.com

Last update 16/03/2026

3 of 5

Other indications

- The setting times of concrete treated with Drykos® **Drymix Ultra** may be influenced by various factors related to the mixture composition and conditions of use, such as the type of cement used, the nature and particle size distribution of aggregates, ambient and concrete temperature, as well as the specific characteristics of the mix design
- It is advisable to perform preliminary qualification tests, especially when introducing new mix designs or starting new productions, in order to confirm system performance under specific conditions of use
- Conditions of use: during the mixing of the product with the concrete, the temperature must be above +4°C.
- Drykos® **Drymix Ultra** is not suitable for sealing dynamic cracks or cracks subject to structural movements
- Fresh concrete must be placed in accordance with the workability times specified for the mixture and must be subjected to adequate compaction and curing
- For anything not covered, contact Technical Support at +39 0171 1874992 or write to info@drykos.com

TECHNICAL PERFORMANCE

Characteristic	Test method	Standard requirements	Performance
Chloride content	EN 480-10	≤ 0.1% by mass	≤ 0.1% by mass
Alkali content	EN 480-12		0.06% by mass
Compressive strength	EN 12390-3	≥ 85% of the control sample	≥ 85% of the control sample
Capillary absorption	EN 480-5	Tested for 7 days after 7 days of curing: test mixture ≤50% by mass of the control mixture. Tested for 28 days after 90 days of curing: test mixture ≤60% by mass of the control mixture	Tested for 7 days after 7 days of curing: test mixture ≤50% by mass of the control mixture. Tested for 28 days after 90 days of curing: test mixture ≤60% by mass of the control mixture
Air content in fresh concrete	EN 12350-7	≤ 2% by volume	≤ 2% by volume
Hazardous substances			See SDS
Density at 20°C	ISO 758:1976		1.12 ± 0.02 (g/ml)
Chemical resistance	ASTM C267	Comparison with non-admixed mixture	No significant variation for continuous exposure to solutions with pH 3–11
Coating suitable for contact with water intended for human consumption	In accordance with Ministerial Decree 174/2004 and Legislative Decree 18/2023		Suitable



ENVIRONMENT AND SAFETY

Safety

For information and advice on safety, handling, storage, and disposal, users of the product must refer to the most recent version of the Safety Data Sheet, which provides information on the physical, ecological, and toxicological characteristics of the product. If necessary, request the updated Safety Data Sheet by contacting Customer Service at +39 0171 1874992 or writing to info@drykos.com. Product compliant with the requirements of Regulation (EC) No. 1907/2006 (REACH) and Annex XVII, entry 47, and subsequent amendments and additions.

Use

Product for professional use.

WARRANTIES AND LEGAL NOTES

Should the product be defective, the liability of Drykos S.r.l. shall be limited solely to its replacement. The information and instructions in this technical data sheet regarding the application and end-use of the products are provided in good faith and reflect current scientific and technical knowledge; however, they do not constitute any guarantee or assumption of liability regarding the final outcome of the work involving their use. Given the variety of operating conditions and external factors beyond the control of Drykos S.r.l. during execution, it is the user's responsibility to verify the product's suitability for the specific application, assuming all risks and liabilities. Drykos S.r.l. reserves the right to modify the properties of its products at any time. Always refer to the most recent version of the product's technical data sheet. This edition cancels and replaces all previous versions. The latest updated technical data sheets are available on our portal at www.drykos.com.



DRYKOS S.r.l.

Piazza Marconi n. 7 12100 - Tarantasca (CN) - Italia

Tel. + 39 0171 1874992 | E-mail info@drykos.com | Web www.drykos.com

Last update 16/03/2026