

KRYSTAL 2000

Liquid Crystalline Waterproofing Admixture

Description

Krystal 2000 is hydrophilic crystalline admixture that is specially designed to permanently waterproof concrete. It is specifically designed for use in above and below the grade applications. It lowers the permeability of concrete and is used in place of surface applied waterproofing membranes for improved durability and longevity of concrete.

Application Areas

- Suitable for above and below the grade applications
- Recreational facilities such as aquatic centers, aquariums, zoos, water parks and marinas
- Suitable for all concrete applications for water impermeability
- Secondary compartment structures
- Concrete homes including basements, foundations, swimming pools, decks, bathrooms, garages and exteriors Precast, cast-in-place and shotcrete applications
- Concrete subjected to wet, harsh and aggressive environment
- Below grade parking structures, basements, elevator pits and foundations of high-rise towers
- Architectural water features such as fountains and waterfalls
- Water containment reservoirs, water treatment tanks, sewage and manholes
- Traffic tunnels, below grade pipelines and subway tunnels
- Bridges, dams and highway infrastructure

Features/Benefits

- Protects concrete against negative and positive water pressure.
- It is a Permeability Reducing Admixture for Hydrostatic Conditions (PRAH).
- Reduces permeability of the concrete.
- Helps to increase the compressive strength of concrete.
- Unlike coatings, Krystal 2000 when added to concrete during mixing becomes an integral part of the concrete for optimum performance
- Self-seals hairline cracks up to 0.5mm (0.02in.)
- Protects concrete against chemical attack and corrosion of reinforcing steel.
- Certified by NSF to NSF/ANSI standard 61.
- Reduced concrete shrinkage and cracking.
- Excellent resistance to waterborne chemicals.
- Protection against sewage and industrial wastes.

Mixing

The water content in any concrete mix is directly related to the porosity of the resultant concrete. Hence, the dosage depends on the amount of mixing water (aggregate moisture included) in the batch mix. Krystal 2000 is added at the rate of 1-2% by weight of the total water (mixing water + aggregate moisture) i.e. 5kg per 100 liters (4.2lbs. per 10 gal.). In a typical 300 Kg per m³ and a water cement ratio, use 6kgs of Krystal 2000.

A.Batch plant: Add Krystal 2000 together with the mixing water.

Reduce the mixing water by 5 liters per m³ (1 gal. per yd³) compared to an untreated mix design. Use normal mixing procedure.

B.Concrete Truck: Add Krystal 2000 into the drum when the truck arrives at the job site. Mix for 8 minutes at high speed before pumping.

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Preliminary lab trials are mandatory for this type of administration to adjust the required mixing water at the batch plant and at the job site. **C.Site mixes:** Concrete mixed in small tumbler mixes can also be improved with Krystal 2000. Add the product in the calculated amount together with the water into the mixer. Start with a semi dry mix and adjust to the desired consistency after 3 minutes of mixing.

Curing

Follow specified curing procedures as necessary. Krystal 2000 is effective whether water curing or a curing compound used.

Technical Properties

Appearance	Blue / Milky Tea, Low Viscous Liquid
pH	7 - 9
Density	1.19g/cm ³ ± 0.01
Chloride Content	Nil
Air Entrainment	< 2%

Packaging

Part 20 liters

Standard Compliance

ACI 212 Classification

Shelf Life

Protect from freezing, if frozen or crystallized, thaw gradually and stir to homogenous mixture. Shelf life in unopened original containers is 12 months when stored at 70°F (21°C).

Precautions

Refer to MSDS. KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin and eyes. Wear rubber gloves and safety goggles during mixing and application. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of water for 15 minutes and seek medical advice.

Limited Warranty

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

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