

Idrocrete KR 1000

Crystallizing Admixture for Waterproofing Concrete

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Idrocrete KR 1000 is a powder admixture made from special hydrophilic components that, when added to a concrete mix, reduces the permeability of hardened concrete.

HOW IT WORKS

When water is added, *Idrocrete KR 1000* reacts with the calcium hydroxide and other products that form during the hydration process of the cement to form compounds of calcium silicate and other non-soluble salts. The crystalline compounds and calcium silicate hydrate are deposited in the voids of the cement matrix and reduce its total porosity, thereby increasing the resistance of the concrete to the penetration of water under pressure.

WHERE TO USE

Idrocrete KR 1000 may be used with any type of concrete when a reduction of permeability is required. Once *Idrocrete KR 1000* has been added to the mix, it reacts with water during the entire service life of the concrete. *Idrocrete KR 1000* may be used to make concrete that is resistant to aggressive environments. The specified exposure class of the concrete must always be respected, and the product cannot be used to make up for poorly designed concrete. To have guaranteed results, *Idrocrete KR 1000* must only be used in concrete that has been correctly designed respecting two basic rules for the production of impermeable concrete: A water/cement ratio of less than 0.5 and an adequate wet curing time.

Idrocrete KR 1000 may be successfully used to produce concrete for the following applications:

- Dams
- Bridges
- Car parks

- Storage tanks
- Pipes and piles
- Retaining walls
- Tunnels
- Marine structures
- Basements and foundations
- Swimming pools
- Precast elements

MIXING

Idrocrete KR 1000 is added to the concrete mix just like any other type of powder admixture. The product must be added in the concrete mixer or in the truck mixer together with all the other components (cement, admixtures and aggregates). Once *Idrocrete KR 1000* has been added, we recommend extending the adequate mixing time so that the admixture is evenly blended throughout the mix.

COMPATIBILITY WITH OTHER PRODUCTS

Idrocrete KR 1000 is compatible with all MAPEI admixtures used in the production of high-quality concrete. MAPEI's Technical Services Department is available to evaluate which admixture or admixture packages are most suitable for any specific need. Contact MAPEI's Technical Services Department for further advice.

DOSAGE RATES

The recommended dosage rate for *Idrocrete KR 1000* is 1% to 2% per 100 lbs. (1 to 3 kg per 100 kg) of cementitious materials. Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI Technical Services Department.

Technical Data

Physical state	Powder
Color	Gray
Density	8.35 lbs. per U.S. gal. (2.2 kg per L)
Primary function	Reduces permeability of concrete
Corrosivity	<i>Idrocrete KR 1000</i> does not contain calcium chloride or other chloride-based components. Its use will not contribute to the increased corrosion of reinforcing steel in concrete.

PACKAGING

Idrocrete KR 1000 is available in 44-lb. (20-kg) bags.

STORAGE

Idrocrete KR 1000 maintains its properties for at least 1 year if kept sealed in its original packaging protected from moisture.

ADDITIONAL INFORMATION

Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

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For the most current product data and BEST-BACKEDSM warranty information,
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