



Krystol Broadcast™

(Waterproofing Dry-Shake for Concrete)

Product Code: K-250

DESCRIPTION

Krystol Broadcast is a crystalline waterproofing treatment for concrete flatwork. Krystol Broadcast is applied as a dry-shake to the fresh concrete surface and trowelled into the concrete during the final finishing. The dry broadcast method produces a smooth finished floor suitable for typical traffic or application of common floor finishes. Krystol Broadcast replaces the need for conventional membrane waterproofing systems, and is best suited for thick concrete slabs that will be power-trowelled during finishing.

When combined with fresh concrete, Kryton's unique and proven Krystol® technology reacts with un-hydrated cement particles to form millions of needle-like crystals. Over a period of weeks and months, these crystals grow, filling the naturally occurring pores and voids in concrete, and permanently blocking the pathways for water and waterborne contaminants. Later, if cracks form due to settling or shrinkage, incoming water triggers the crystallization process and additional crystals begin to grow, filling cracks and ensuring that the structure's waterproofing barrier is maintained and protected.

FEATURES

- Replaces unreliable exterior membranes, liners and coatings
- Self-seals hairline cracks up to 0.5 mm (0.2 in.)
- Fugitive dye coloring ensures uniform distribution
- Does not change finished slab appearance
- Protects reinforcing steel against corrosion
- Can be used as a wear surface
- Reaches well below the surface and is not harmed by surface wear or abrasion
- Withstands extreme hydrostatic pressure
- Finished concrete may be painted or covered with any floor finish as usual

KEY BENEFITS

- Permanently waterproofs concrete
- Lowers the cost of waterproofing
- Reduces the cost of maintenance and repairs

RECOMMENDED USES

- Slabs on grade or below grade
- Parking structures
- Marine structures
- Reservoirs and water treatment plants
- Basements and pits
- Warehouse and commercial floors

The dry-broadcast method is best suited to very thick concrete slabs that will be power-trowelled during finishing. For typical thickness slabs, KIM admixture may be more cost effective.



PHYSICAL PROPERTIES

Appearance	Gray powder
Appearance during application	Green (fugitive dye - fades after application)
Bulk density g/cm ³ (lb. /cu. ft.)	1.3 (81)
pH (when mixed with water)	13

HARDENED PROPERTIES

Hydrostatic head resistance	140 m (460 ft.)
-----------------------------	-----------------

PERMEABILITY

DIN 1048: Part 5 – Permeability of Hardened Concrete

Concrete specimens treated with Krystol Broadcast were subjected to hydrostatic pressure of 72.5 psi (500 KPa) for a period of 72 hours. This pressure is equal to 51 m (167 ft.) of water head pressure. Krystol Broadcast treated sample reduced water permeability 60% compared to the equivalent plain concrete.

Metro Testing Laboratories Ltd., 2009

APPLICATION

Read and distribute Application Instruction 3.11 — Waterproofing with Dry-Shake before using this product.

Krystol Broadcast is a dry powder that is applied by spreading onto the concrete surface just before finishing begins at a coverage rate of 1 kg/m² (0.2 lb./sq. ft.). Proper curing is essential to achieve the performance and benefits of Krystol Broadcast. Cure in accordance with ACI 308.1 guidelines.

LIMITATIONS

Krystol Broadcast is an effective system for rigid structures only and may not reliably seal cracks and joints that experience variable loading or repeated movement. Consult a Kryton representative for project specific recommendations.

SAFETY

Read the Material Safety Data Sheet (MSDS) for this product. For professional use only. This product becomes caustic when mixed with water or perspiration. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves. The safety precautions for Krystol Broadcast treated concrete are the same as for regular concrete.

PACKAGING

- 25 kg (55 lb.) resealable pails

SHELF LIFE

Krystol Broadcast has a minimum shelf life of 24 months for unopened pails, and 4 months for properly resealed pails.

WARRANTY

Kryton International Inc. warrants that its products are free from manufacturer's defects and, when applied in accordance with the current specification and application instructions will perform as so stated in its product literature. Because methods and conditions of use are beyond the control of Kryton, no guarantee, expressed or implied can be given as to the results of application. Liability of Kryton shall be limited to replacement of materials proved defective or, at its option, refund of the purchase price of the product.

Kryton International Inc.