

# TECHNICAL DATA SHEET

## Mortar Protection Admixture (Above Grade)



# Krystol Mortar Admixture™ (KMA)

Product Code: K-309

## DESCRIPTION

Krystol Mortar Admixture (KMA) is a hydrophilic crystalline admixture used to provide long-term protection of masonry mortars and concrete masonry units against water and waterborne contaminants by reducing permeability and absorption of the mortar.

KMA simplifies installation by removing the need for surface applied sealers and is easily incorporated into the existing mix-design and application processes. KMA provides superior waterproofing performance that lowers building maintenance and repair costs.

KMA contains Krystol technology. When added to cementitious mortars or concrete masonry units, Krystol chemically reacts with water and un-hydrated cement particles to form insoluble needle-shaped crystals that fill capillary pores and micro-cracks in the concrete and block the pathways for water and waterborne contaminants. Any moisture introduced over the lifespan of the concrete will initiate crystallization, ensuring permanent waterproofing protection.



## FEATURES & BENEFITS

- Enhances durability by resisting salt attacks freeze thaw degradation, corrosion of embedded steel and water penetration
- Minimizes the chance of debonding
- Preserves aesthetics by resisting stains and discoloration caused by efflorescence, mold and mildew, and rust
- Enhances workability for ease of use, improved adhesion and reduced cracking
- Self-seals minor cracking
- Withstands water under pressure such as wind-driven rain
- Simplifies installation and shortens the construction cycle
- Eliminates the upfront building and labor costs specific to surface applied sealers
- Delivers a permanent solution that lasts the lifetime of the mortar
- Increases durability, decreasing building maintenance and repair costs
- Improves aesthetics by maintaining the original appearance for lasting attractiveness
- Provides superior performance enhancing your reputation for high quality work

## RECOMMENDED USES

Use KMA to provide permanent protection for:

- Rendering and plastering mortar (including stucco and other thin topping mixes) over concrete masonry walls or other prepared substrates
- Masonry mortar (i.e., mortar that goes between the masonry units)
- Concrete masonry units (i.e., blocks when they are manufactured)

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### PROPERTIES

| <u>Physical Properties</u>   |  |
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| Appearance   | Light, off-white powder  |
| Bulk density (g/cm <sup>3</sup> (lb. /cu. ft.))                                  | 0.7 (44)   |
| pH (dissolved in water)  | 12   |
| <u>Plastic Properties</u>  |  |
| Water Reduction, ASTM C270<br>Standard Specification for Mortar for Unit Masonry | Approximately 5% water reduction   |
| <u>Hardened Properties</u>   |  |
| Water Absorption, BS EN 480-5 Determination of Capillary Absorption              | 50% reduction in water absorption compared to control                      |
| Permeability, DIN 1048: Part 5 – Permeability of Hardened Concrete               | No leakage or dampness<br>(10 days constant pressure of 0.5 MPa, 72.5 psi) |

### APPLICATION

Detailed application instruction can be found in **Application Instruction 6.11 — Protecting Masonry Mortar** or **Application Instruction 6.21 — Protecting Rendering & Plastering Mortar before using this product**. Dose KMA at 2% by weight of cement. When dosing on the jobsite, measure and add 1 liter (1 quart) of tightly-packed KMA for each 40kg (88 lb.) bag of cement in your mortar mix. Mix well. Reduce water if necessary. It is designed to be used with existing mix design and installation practices. Proper curing is essential to achieve the performance and benefits of KMA.

### LIMITATIONS

KMA is an effective system for rigid structures only and may not resist water for mortar that experiences variable loading or repeated movement. Consult a Kryton representative for project specific recommendations.

### SAFETY

Read the Safety Data Sheet (SDS) for this product. For professional use only. Avoid contact with skin or eyes. Avoid breathing dust. Wear a dust mask, long sleeves, safety goggles and impervious gloves.

### PACKAGING

Krytol Mortar Admixture is available in 15 kg (33 lb.) resealable pails.

### SHELF LIFE

When stored in a dry enclosed area, KMA has a shelf life of at least 3 years for unopened pails.

### WARRANTY

Kryton International Inc. (Kryton) warrants that Kryton products are free from manufacturing defects and comply with the specifications given in their respective technical data sheet. Because conditions of use, such as site conditions, surface preparations, workmanship, concrete ingredients, weather, structural issues and other factors are beyond the control of Kryton, no warranty can be given as to the results of use. Purchaser agrees to seek the advice of qualified professionals and to determine for themselves the suitability of the products for their intended purpose and assumes all risks. Purchaser's sole remedy is limited to replacement of any product proven defective or at Kryton's option refund of the purchase price paid. THIS LIMITED WARRANTY CONTAINS THE ENTIRE OBLIGATION OF KRYTON. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KRYTON SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. No representative of Kryton has the authority to make any representations or provision except as stated herein. Kryton reserves the right to change the properties of its products without notice.