



Use of KIM® Admixture: Instructions for Ready-mix Truck Driver

PRODUCT DESCRIPTION

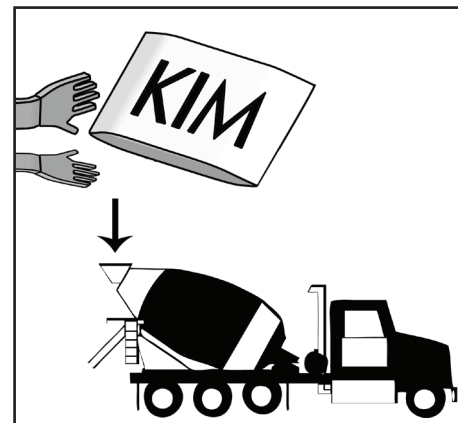
Krytol Internal Membrane™ (KIM®) is a chemical admixture in dry powder form that is effective in creating waterproof concrete when used in accordance with the manufacturer's written instructions.

EFFECT ON PLASTIC CONCRETE

The KIM® admixture has been specially formulated to meet the requirements of projects in different climate conditions as follows:

- **KIM-HS:** This version of KIM® is used for most common applications. KIM-HS is compatible with common admixtures, such as plasticizers, accelerators, retarders and air-entrainers.
- **KIM-AE:** This version of KIM® is specially designed for concrete requiring air-entrainment to resist freezing and thawing cycles. KIM-AE will increase air content by 3-5 %. Adjust or remove any air-entraining admixtures accordingly.
- **KIM-ES:** This version of KIM® is specially designed for use in hot climates and mass concrete. KIM-ES will prolong the slump retention of the concrete and delay the initial setting time. Adjust or remove set retarding admixtures accordingly.

All versions will typically delay the setting times of the concrete. Consult with a Kryton Technical Services Representative for the most appropriate KIM® admixture for your project.



Be aware of the differences in air entrainment and retardation between KIM-HS, KIM-AE & KIM-ES.

BATCHING CONSIDERATIONS

- Ensure your drum is empty of water prior to batching.
- Do not change the water cement ratio (WCR).
- Do not use recycled water.
- When using multiple admixtures in the same batch of concrete, they should be dispensed separately into the concrete to avoid intermixing and possible interference of the admixtures.
- It is recommended that cast-in-place concrete be batched at WCR of approximately 0.40 (0.37 for shotcrete). The maximum total WCR is either 0.45 (0.40 for shotcrete) or the specified maximum WCR. This includes all water present in the concrete and any added on route and on site.
- Under some circumstances, you may observe slump loss at 25-40 minutes. This is false set and slump may recover with continued mixing. False set may be avoided by dosing KIM on the project site. Avoid placing KIM during the false set period.

ADDING KIM DOSAGE ON SITE

- Dose KIM at 2% by weight of cementitious materials (incl. SCMs such as fly ash and slag) to a maximum dosage of 8 kg per cubic meter (13.5 lbs per cubic yard).
- Premeasure the required KIM material and carry on the truck.
- KIM in pails – before opening, loosen compacted material by turning the pail over once or twice. Dispense directly into concrete mixer.
- KIM in bags can be thrown un-opened into the concrete mixer. The bags are designed to disintegrate in the mixer.
- Store any unused portions in an airtight container to prevent moisture contamination.
- Mix concrete for at least 10 minutes on medium/high speed after KIM dosing. If the slump is below specification, add a mid or high range water reducer to achieve the required slump. Only add additional water with the approval of the quality control technician. Record all water additions on the batch ticket and do not exceed the specified WCR.
- The addition of water without supervision and approval may void the manufacturer's warranty.

SAFETY

- Before using or handling, read the Material Safety Data Sheet for this product.
- Safety precautions for KIM concrete are no different than for normal concrete.
- KIM powder becomes caustic when mixed with water or perspiration. Take appropriate safety precautions to prevent contact with skin or eyes and to prevent breathing dust.



Application Instructions

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