



### 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.

#### EFFECTS ON PLASTIC CONCRETE

- KIM reduces the water demand for a given slump. For most mixes, you can expect a slump increase of approximately 25mm (one inch).
- KIM retards the initial and final setting times.
- KIM improves the pumpability of concrete.
- KIM entrains air \*

Be aware of the differences in air entrainment between KIM and KIM-HS.

#### \* KIM® HS

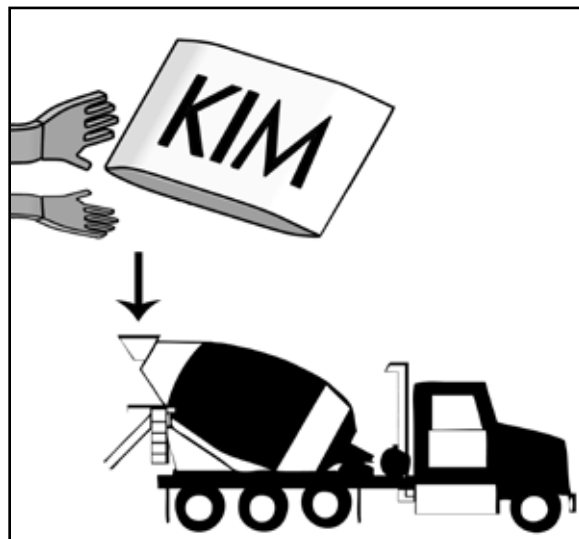
This specialized version of KIM® is available with reduced air-entrainment properties. KIM will add about 3-5% air entrainment while KIM-HS will increase air content by approximately 1%.

#### 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 water to cementitious ratio (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 8kg 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 dosage.
- 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 water-cement ratio.
- The additional 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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