KingAdd ® 25AW

Antiwash admixture system for underwater concrete.

DESCRIPTION

KingAdd 25AW is concrete admixture formulated from selected polymers specially designed to produce more cohesive grouting and concrete mixes. It surrounds the cement particles by gel action to minimise the washout in the underwater cementitioius applications.

APPLICATIONS

- Underwater concrete applications.
- Foundations and piles where high water table occurs.
- To produce cohesive concrete mixes.
- Fluid grouting that may have subject to washout.

ADVANTAGES

- Higher concrete strength in the underwater concrete applications by significant minimizing the washout of cement particles.
- Improve workability by reducing placing and compaction problems.
- Minimizing segregation and bleeding problems by improving cohesion.
- More durable concrete as a result of reduction in permeability and lower water to cement ratio.

COMPATIBILITY

KingAdd 25AW can be used with all types of Portland cement and cement replacement materials.

KingAdd 25AW is compatible with KINGKRETE concrete admixtures used in the same concrete mix. In case of other types of admixtures have to be used, contact KINGKRETE technical department for more advice.

METHOD OF USE

KingAdd 25AW should be added gradually after adding all of materials of concrete mix and should allow for 2 minutes extra mixing time.

REDUCTION OF WASHOUT

KingAdd 25AW will minimise the washout of cement and fines particles in the mix significantly, also other factors will help to minimise the washout by making a mix design to get more cohesive mix like increasing the sand percentage over the coarse aggregates percentage.

TECHNICAL PROPERTIES @ 25^{0}C:

Colour:	Brown powder
Bulk density:	0.6 ± 0.1 g/cm^3
Chloride content: BS 5075	Nil
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages

To check the percentage of washout reduction, normally a comparison test should be done between control concrete mix without using KingAdd 25AW admixture versus concrete mix using KingAdd 25AW, fill a perforated basket with concrete mix and drop it through the water for 3 to 5 times and measure the weight loss on each time.

Normally up to 80% of washout reduction can be achieved by using the KingAdd 25AWout comparing with control mix.

PACKAGING

KingAdd 25AW is available in 10 kg bags.

DOSAGE

The guidance dosage of KingAdd 25AW is 0.25 - 1.0 kg/100 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica.

Representative trials should be conducted to determine the optimum dosage of KingAdd 25AW to meet the performance requirements by using the materials and conditions in actual use.

EFFECTS OF OVER DOSAGE

Over dosing of KingAdd 25AW will cause the following:

- Significant increase in retardation.
- Affecting the workability significantly.

Ultimate concrete strength will not be adversely affected unless of using a dosage of more than double of recommended dosage

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SETTING TIME

Although the setting time is dependent on the dosage of KingAdd 25AW, the following factors should be considered:

- Retardation is increased with lower levels of tri-calcium in the cement.
- Lower temperatures will delay the setting time.
- SRC cement gives higher retardation levels than ordinary cement.
- Using more than one type of admixture in the same concrete mix could affect the setting time.
- Retardation level is increased when cement replacement materials are used in the concrete mix.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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AD-25AW-R3-2601

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