

# KingAdd® GS100

**Dispersing and expansive agent for cementitious grouts.**

## DESCRIPTION

KingAdd GS100 is a dispersing admixture formulated from selected polymers specially designed to enable the water content of the cementitious grout to perform more effectively. It has also stabilizing agent to reduce bleeding and segregation in cementitious grout and micro cements for grout injection.

## APPLICATIONS

- ☐ For dispersing cements and micro cements in injection applications.
- ☐ Non-shrink in filling grouts.
- ☐ High flow cementitious grout application.
- ☐ To accelerate early strength development.
- ☐ To produce high quality cementitious grout of improved durability and water tightness.

## ADVANTAGES

- ☐ Minimising segregation and bleeding problems by improving cohesion.
- ☐ Non-shrink system.
- ☐ More durable grout as a result of reduction in permeability.
- ☐ Chloride free.

## COMPATIBILITY

KingAdd GS100 can be used with all types of cement and cement replacement materials. KingAdd GS100 is compatible with other DCP admixtures used in the same mix. For grout injection, it is important to perform lab trials so as to reach to the suitable dosages between water, cement, bentonite and KingAdd GS100.

## METHOD OF USE

KingAdd GS100 should be added to the mixing water before adding the cement.

## DOSAGE

The guidance dosage of KingAdd GS100 is 0.50 - 2.50 kg/100 kg of cementitious materials in the mix, including GGBFS, PFA or micro-silica.

Representative trials should be conducted to determine the optimum dosage of KingAdd GS100 to meet the performance requirements by using the materials and conditions in actual use.

## TECHNICAL PROPERTIES @ 25°C:

|  |  |
|--|--|
| Colour:                                      | Off white to Yellowish powder  |
| Fresh wet density:<br>(1 : 1 water : cement) | 1.6 ± 0.1 g/cm <sup>3</sup>  |
| Expansion:<br>ASTM C827/C827M-10             | Up to 1%   |
| Solubility in water:                         | Soluble  |
| Toxicity                                     | Non-toxic  |
| Chloride content:<br>BS5075                  | Nil  |
| Air entrainment:                             | Typically less than 2% additional air is entrained above control mix at normal dosages |

## SETTING TIME:

Although the setting time is independent on the dosage of KingAdd GS100, 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 mix could affect the setting time.
- ☐ Retardation level is increased when cement replacement materials are used in the grout mix.

## CLEANING

KingAdd GS100 can be washed with fresh cold water.

## PACKAGING

KingAdd GS100 is available in 1 kg (small bags) and 20 kg (big bags).

## 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



# KingAdd® GS100

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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### GS100-R3-2601

#### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

#### NOTE

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