

# KingAdd ® 100LW

# Air enteraining agent for concrete.

#### DESCRIPTION

KingAdd 100LW is an air entraining admixture for concrete, formulated from selected polymers specially designed to create microscopic air bubbles that are uniformly distributed in the concrete mix. This effect can be used to improve concrete cohesion and resistance to freeze thaw cycles.

#### APPLICATIONS

- In concrete mixes for roadways, airport runways and other concrete exposed to potential frost damage.
- To increase the durability of concrete and its resistance to damage by frost and de-icing salts.
- To increase cohesion of concrete mixes to overcome bleed, segregation and sand runs where poorly graded aggregate with high fine content needs to be used.

#### ADVANTAGES

- Greatly improves cohesion, reduces segregation and bleeding.
- Increased freeze/thaw cycle resistance.
- Improves workability and plasticity.
- Exceptionally effective with aggregate with high fine content.
- Suitable for mixes containing PFA, GGBS and microsilica.
- Chloride free.

#### COMPATIBILITY

KingAdd 100LW can be used with all types of Portland cement and cement replacement materials.

KingAdd 100LW is compatible with other KINGKRETE admixtures used in the same concrete mix

If more than one type of admixture is to be used in concrete mix, they must be dispensed to the concrete separately.

# STANDARDS

KingAdd 100LW complies with ASTM C260.

# METHOD OF USE

KingAdd 100LW should be added to the concrete with the mixing water to achieve optimum performance.

Automatic dispenser should be used to dispense the correct quantity of KingAdd 100LW to the concrete mix.

### Technical Properties @ 25°C

Colour	Brown liquid
Freezing point	≈ 0°C
Specific gravity	1.00 - 1.02
Chloride content: BS5075	Nil

#### DOSAGE

The guidance dosage of KingAdd 100LW to achieve air content of  $5 \pm 2\%$  in the concrete mix is 0.10 - 0.30 liters/ 100 kg of cementitious material in the mix, including GGBFS, PFA or microsilica.

Representative trials should be conducted to determine the optimum dosage of KingAdd 100LW to meet the performance requirements by using the materials and conditions in actual use

Points to be considered that affecting air entrainment

Any variation in the following factors will cause change in the air content:

- Cement fineness.
- Concrete temperature.
- Sand grading.
- Mixture types.
- Compaction method.
- Carbon or organic impurities

### **Effects of Over Dosage**

Over dosage of KingAdd 100LW will cause the following:

- Significant increase in air content which may cause slight reduction in the compressive strength.
- Slight increase in setting time.

# **PACKAGING**

KingAdd 100LW is available in 25 liters pails, 210 liters drums and 1000 liters bulks supply.

### CLEANING

KingAdd 100LW can be washed with fresh cold water.



#### 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 Qatar facility 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.
- ® = Registered trademark of the KingKrete-Group in many countries.

# KingKrete-Qatar/KingAdd\_100LW\_02/v2/07\_20

# 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

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.



