

KEM PLAST 100

Sodium lignosulphonates based water reducing concrete admixture.

Ref. CA/PL-V1-0112

Description

KEM PLAST 100 is based on a modified sodium lignosulphonates. It is supplied as a brown liquid, instantly dispersible in water. It is used as a water reducer for normal strength concrete.

Uses

- Ready mixed concrete.
- Pre-cast concrete production
- Pumped concrete.
- Low water/binder ratio mixes.

Advantages

- Increased Workability
- Water reduction gives higher strengths without cement increase or workability loss
- Increased early age strength.
- Reduced Permeability
- Better dispersion of cement particles and increased cohesion minimizes segregation and bleeding and gives improved surface finish.
- Improved Pumpability

Standards

KEM PLAST 100 complies with BS 5075, 1982, and ASTM C-494 Type A, IS 9103 Type C

Typical Properties

Chloride Content: Nil.

Specific Gravity: 1.16 at 20° C.

Air Entrainment: Less than 1% additional air is entrained.

Setting Time: Less than 1 hour retardation at normal dosage.

Compatibility: Compatible with sulphate resisting and other Portland cements.

Compressive Strength : Reduction in water / cement ratio will result in up to 50% increase in early age compressive strength.

Direction for use

The requisite quantity of KEM PLAST 100 is added inside the concrete batch mixer with gauging water.

The high dispersion property of KEM PLAST 100 enables a saving in the quantity of cement used.

Dosage

As a general guide the dosage is normally:

0.3 - 0.8% of cement by weight. However the dosage can be increased up to 1.2% with prior consultation with our technical services department.

The optimum dosage for KEM PLAST 100 Should be determined by site trials with the particular Concrete mix under prevailing ambient condition.

Curing: As with all structural concrete, normal curing methods apply.

Effects of Over Dosage

An overdose of double the intended Amount of KEM PLAST 100 will result in very high Workability and some retardation, the ultimate Compressive strength of the concrete may not be Impaired provided cured properly.

Compatibility

KEM Plast 100 is compatible with OPC, PPC, Fly Ash, GGBS & micro silica

Workability

Addition of KEM Plast 100 reduces the water demand of concrete and improves the concrete workability at fixed W/C ratio. When the W/C ratio is lowered, addition of KEM Plast 100 maintains the original workability and increases the strength of concrete.

Packaging

KEM PLAST 100 is supplied in 200 kg.

Storage

KEM PLAST 100 should be protected from extremes of temperature. Should the material become frozen, it must be completely thawed and

thoroughly mixed before use. KEM PLAST 100 has a minimum shelf life of 12 months provided temperature is kept within the range 5° C to 30° C.

Precautions

HEALTH AND SAFETY

KEM PLAST 100 is non-toxic. Any splashes to the Skin should be washed immediately with water. Any splashes to the eyes should be washed immediately with water and medical advice should be sought.

Fire : KEM PLAST 100 is non-flammable.

Cleaning : Spillages of KEM PLAST 100 can be removed with water.

Technical service

Chembond has established itself in various fields on the basis of its dependable technical service. For this purpose, we maintain a well equipped laboratory for research & quality assurance of all products. Our experienced personnel are always on call and would always be available for product demonstrations and product performance monitoring.

Limitation of Liability:

This information is based on our current level of knowledge. It is given in a good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.