



KEM SUPLAST 101 R

Concrete Super plasticizer cum Retarder

Ref. CA/SP-V1-0112

Description

KEM SUPLAST 101 R is a high range water reducing & slump retaining concrete admixture, manufactured to comply to the IS 9103 - 1999 type E and ASTM C 494 - 86 type G specifications. KEM Suplast 101 R is brown colored, ready to use liquid admixture formulated from selected water-soluble polycondensates and polymers. KEM Suplast 101 R incorporates a new generation of highly powerful dispersants, which make the product possible to utilize the full potential of cement-water matrix at a very low dosage.

Uses

- Concrete containing fumes Silica/ Metakaolin.
- Ready mixed concrete.
- Complex reinforced sections.
- Pre-cast concrete production
- Long-distance transporting.
- Pumped concrete.
- Low water/binder ratio mixes.
- Mixes requiring >20% water reductions.

Advantages

- Increases concrete workability even at low W/C ratios.
- Leads to increase concrete strength due to possible reduction in water content.
- Lowers the permeability and increases durability of concrete.
- Eliminates segregation and bleeding effectively producing pumping concrete.
- Improves slump retention.
- Controlled setting helps to avoid cold joints in concrete.
- Delay in setting time also enables to work in under water concrete.

Typical Properties

Appearance	: Brown liquid.
Sp. Gravity	: 1.2 ± 0.02 .
pH value	: Above 6
Cl⁻ content	: Nil
So₄²⁻ content	: Nil
Air content	: < 1 % over control

Standards

KEM Suplast 101 R meets/exceeds the requirements as per IS-9103 and ASTM C494, Type-G.

Direction for use

The requisite quantity of KEM Suplast 101 R is added inside the concrete batch mixer with gauging water.

The high dispersion property of KEM Suplast 101 R enables a saving in the quantity of cement used.

Dosage

KEM Suplast 101 R is dosed between 0.3% and 1.5% of cement by weight. However the dosage can be increased up to 2% with prior consultation with our technical service department.

To achieve the optimum dosage for effective performance, it is always recommended to carry out trial design mixes at site conditions.

Effects of over dosage

An over dose of double the maximum recommended dose of KEM Suplast 101 R will result in very high workability, possible severe retardation and segregation. Otherwise the ultimate compressive strength of the concrete may not be impaired, if properly cured. The overdosing effect will be more severe when used with sulphate resisting cement.

Compatibility

KEM Suplast 101 R is compatible with OPC, PPC, Fly Ash, GGBS & micro silica



Workability

Addition of KEM Suplast 101 R 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 Suplast 101 R maintains the original workability and increases the strength of concrete.

As a concrete retarder, KEM Suplast 101 R delays the cement hydration process resulting in better slump retention. This is of great importance especially in countries like India where the ambient and concrete temperatures are high.

Packaging

Supplied in 250 kg and Bulk tanker load

Storage and Shelf life

Store Away from direct sunlight.

Shelf life is 12 months from manufacturing date, for original sealed packaging.

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.

Safety precautions

KEM Suplast 101 R is non-toxic and non-flammable. However, any splashes on the human body, must be washed with plenty of water.

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