



# KEM SUPLAST 110 R

## Concrete Super plasticizer cum Retarder

Ref. CA/SP-V1-0612

### Description

KEM SUPLAST 110 R is a high range water reducing & slump retaining concrete admixture, manufactured to comply to the IS 9103 and ASTM C 494 type G specifications. KEM SUPLAST 110 R is brown colored, ready to use liquid admixture formulated from selected water-soluble polycondensates and polymers. KEM SUPLAST 110 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

- Pavement quality concrete.
- Long hauls.
- Pumped concrete.
- Concrete containing Granulated Slag/ Pozzolans
- Mass concrete pours.
- Hot weather concreting

### 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 colored liquid.
Sp. Gravity @25°C	: 1.18 ± 0.02
pH value	: ≥ 6.0
Cl <sup>-</sup> content	: ≤ 0.2 %

### Standards

KEM SUPLAST 110 R meets/exceeds the requirements as per IS-9103 and ASTM C494, Type-G.

### Direction for use

The requisite quantity of KEM SUPLAST 110 R is added inside the concrete batch mixer with gauging water.

The high dispersion property of KEM SUPLAST 110 R enables a saving in the quantity of cement used.

### Dosage

KEM SUPLAST 110 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 110 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 110 R is compatible with OPC, PPC, Fly Ash, GGBS & micro silica

### Workability

Addition of KEM SUPLAST 110 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 110 R



maintains the original workability and increases the strength of concrete.

As a concrete retarder, KEM SUPLAST 110 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 110 R is non-toxic and non-flammable. However, any splashes on the human body, must be washed with plenty of water.

#### **Chembond Chemicals Limited**

Chembond Centre, EL-71, MIDC,  
Mahape, Navi Mumbai, India 400 710.  
Tel.: +91 22 3921 3000 Fax: +91 22 3921 3100  
Website: [www.chembondindia.com](http://www.chembondindia.com)  
E-mail: [enquiries.conschem@chembondindia.com](mailto:enquiries.conschem@chembondindia.com)

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