KEM SUPLAST SCC 30

Hyper Plasticizer based on modified Poly Carboxylic Ether (PCE)

Ref. CA/SP-V1-0412

Description

KEM SUPLAST SCC 30 is a third generation high performance concrete hyper plasticizer, an opaque – light brown coloured solution of Poly Carboxylic Polymer. KEM SUPLAST SCC 30 disperses cement particles and fillers by electro static repulsion coupled with steric hindrance. Stabilizes the cement particle's capacity to disperse and separate, resulting highly workable/flowable concrete with greatly reduced water content. KEM SUPLAST SCC 30 allows a water reduction up to 40% while workability is maintained. Thus with KEM SUPLAST SCC 30 we can produce concrete with high Early and ultimate strength with minimal voids and therefore optimum density. In applications where high final strengths are required for high performance concrete (HPC) or self-consolidability concrete (SCC) the use of KEM SUPLAST SCC 30 is suggested.

Uses

- To produce high early strength concrete
- Self-compactable concrete
- Water reduction up to 40%
- Ready Mix and Pre-cast Concrete Industries where high durability and performance is required.

Advantages

- To produce concrete with larger water reduction when cement and filler contents are high.
- To produce concrete with high workability without segregation and bleeding.
- Better resistance to aggressive atmospheric conditions, to carbonation, with lower permeability.
- Improved surface finish, reduced shrinkage & Creep and improved durability.
- Suitable to produce concrete containing cement replacing Pozolona like micro silica (silica fume), slag (GGBFS) and fly ash (PFA).

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Poly Carboxylic Ether</td>
</tr>
<tr>
<td>Colour</td>
<td>Light Brown</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.07±0.02</td>
</tr>
<tr>
<td>pH</td>
<td>7 – 8</td>
</tr>
<tr>
<td>Chloride content</td>
<td>&lt;0.05%</td>
</tr>
</tbody>
</table>

Standards

KEM SUPLAST SCC 30 meets/exceeds the requirements as per ASTM – C494 Type- A & F.

Direction for use

KEM SUPLAST SCC 30 is a ready to use admixture that is added to the concrete at the time of batching. The maximum effect is achieved when the KEM SUPLAST SCC 30 is added after the addition of 60 - 90% of the water. KEM SUPLAST SCC 30 must not be added to the dry materials.

Though mixing is essential & a minimum mixing cycle, after the addition of the KEM SUPLAST SCC 30, of 60 seconds for forced action mixture is recommended.

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

Cleaning : Spillages of KEM SUPLAST SCC 30 can be removed with water.

Dosage

0.2 – 2.5% by weight of cement and Pozolona content. For SCC dosage is approximately 0.8% - 1.2%. To determine the optimum dosage lab trials are recommended.

Compatibility

KEM SUPLAST SCC 30 is compatible with all portland cements that meet recognized international standards. KEM SUPLAST SCC 30 must not be used in conjunction with any other admixture. KEM SUPLAST SCC 30 is suitable for mixes containing -

- Microsilica.
- Pulverised Fuel Ash (P.F.A.).
Packaging

KEM Suplast SCC 30 is available in 225 kg drums & in bulk tanks upon request.

Storage and Shelf life

**Shelf life** : 12 months in the original un-opened packing.
**Storage** : Keep away from direct sunlight and extreme heat

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 SCC 30 is non toxic. Any splashes to the skin and eyes should be washed immediately with water and medical advice should be sought.

**Fire** : KEM Suplast SCC 30 is non flammable.