

Techno HyperCrete S20

Modified Polycarboxylic Ether based Hyperplasticiser for concrete

Product Description

Techno HyperCrete S20 is a new generation hyperplasticiser based on modified polycarboxylic ether. The unique mechanism of action of polycarboxylic ether present in Techno HyperCrete S20 greatly enhances the effectiveness of cement dispersion and thereby reducing the amount of water required for mixing. Techno HyperCrete S20 is chloride-free and compatible with all types of cement.

Standard

Conforms to IS:9103-1999 (reaffirmed 2004), Edition 2.2 (2007 – 2008), ASTM C494, Type F & G

Uses

Techno HyperCrete S20 is used to increase workability without loss of strength or to enable water reduction for the same workability resulting in dense rheodynamic concrete with high ultimate strength. This product is very useful in producing high flowable concrete for short distance concrete pours. Suitable for concrete in strength class of 20-40 N/mm ²

Properties	
Form	Light Yellow Liquid
Specific Gravity	1.04 ± 0.02 (at 27℃ ± 3 °C)
Setting & Hardening	Sets very early with moderate dosage. There may be retarding effect on the setting time with high dosage.
Chloride Content	NIL.
Air Entrainment	May increase very marginally
Compatibility	Can be used with all types of Portland and Slag cements including Microsilica, fly ash, GGBFS
pH ±1	7

Advantages

- Substantial improvements in workability and flow properties without increased water.
- The internal friction and thixotropy of mix is reduced to a minimum without the risk of segregation, thus making concrete pumping more efficient
- Bond strength of concrete to reinforcement steel is considerably increased

Consistency

Techno HyperCreteS20 is formulated from carefully selected raw materials and is manufactured under controlled strict quality condition to produce a consistent product.

Dosage

The optimum dosage should be determined by site trial with the particular concrete mix. As a guide the rate of addition is generally in the range of 300 to 1000 ml per 50kg of cement depending on the function. The plasticizing-cum-water reducing properties are improved if the admixture is added to moist concrete after adding 60-70% of mixing water. Addition of Techno HyperCrete S20 to dry cement or aggregate is not recommended.

Function	Dosage
As superplasticizer-flowing concrete	300 to 400 ml per 50 kg of cement
As high range water reducing admixture and for extended working time	500 to 1000 ml per 50 kg of cement

Caution: Over dosage of Techno HyperCrete S20 may result into segregation/bleeding of mix, delayed initial/final set, increased plastic shrinkage, air entrainment, etc

Methods of Use

Techno HyperCrete S20 is supplied ready for use. For maximum dispersion throughout the mix, measured quantity of Techno HyperCrete S20 should be added directly into the mixer at the same time as the mixing water. On no account should be added to the dry cement. Precautions

Estimating

Packaging

TechnoHyperCrete S20 is supplied in 250kg carbouys

Storage

Shelf Life

Techno HyperCrete S20 has a shelf life of 18 months from the date of manufacture provided the temperature is within the range of 20°C to 40°C. It is recommended that the drums be stored in shade.

Health & Safety

Techno HyperCrete S20 is non-toxic, non-flammable and splashes to the skin should be washed with copious amounts of water.

If contact with eyes occurs, wash well with water immediately and seek medical advice.

Warning

Although the technical details mentioned in the datasheet are recommended to the best of our experience & knowledge, information must be taken merely indications. Practical trials have to be conducted at site for arriving the optimum dosage. In every case, the user alone is fully responsible for any consequence deriving from the use of the product

Important: Technokem products are guaranteed against defective materials and are sold subject to its standard terms and conditions of sale. It is the Customer's responsibility to satisfy themselves by checking with the Company whether the information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current Technical Literatures. However, Technokem does not warranty or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendation relating to application and end use are given in good faith.

For Complaints/Suggestions:
Please write to our Customer Care Executive at
TechnoKem Manufactures of Construction Chemicals

#301, Krishna Classic, Road No.17, Plot No. 51, Sardar Patel Nagar, Kukatpally, Hyderabad - 500085, Off: 040 - 29559256

