CHRYSO[®]Optima K9313

High Range New Generation Super Plasticizing Admixture



Description

CHRYSO®Optima K9313 is a new generation superplasticizer based on POLYCARBOXYLIC ETHER. It has a high dispersion capability and therefore imparts very high plasticizing effect, acts as a High range water reducer for concrete. CHRYSO®Optima K9313 is especially developed for Ready Mix & Job site Application.

Indicative characteristics

- Form
- : Light Amber Liquid : 1.11 ± 0.02
- Specific GravityAir entrainment

Chloride Content

- : \leq 1.5 % over control mix.
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- : ≥6
- : Nil, as per BS 5075 (Part-I)
- Compatibility : OPC, Fly Ash, PPC and SRC.

Advantages :

Thanks to specifically designed molecular structure, CHRYSO® Optima K9313 enables the concrete manufacturer to produce high performance, flowable concrete of M-60 & above grades with high fines content. It also minimizes the risk of excess retardation though retains the Flow / Workability for longer time period, often to the tunes of 3-4 hours. Thereby green concrete can be hauled for longer distances and still be placed conveniently around congested reinforcement. The bond strength of concrete to reinforcement steel is considerably increased. High water reduction minimizes shrinkage or cracking yielding better surface finish.

For a given concrete mix, keeping the cement consumption and workability constant, substantial reduction in the amount of mixing water (up to 32%) can be achieved, to produce concrete of high compressive strength. Alternatively, for the same concrete mix, keeping everything else constant, *a definite economy in cement content*, ranging from 20% to 30%, can be achieved.

Domains of application

- All cement types
- Pumped concrete with moderate SCM usage
- Slump retention at high ambient temperature
- Self-Consolidating Concrete
- Ready mix concrete & Jobsites
- Concrete for highly reinforced structures
- High to very high performance concrete

Precautions

Not to be stored at high temperatures for long periods. Should be protected from frost. It is Non-toxic and formulated from chemicals which present no fire or health hazards.

Method of use

Dosage: Optimum dosage can only be established after trials, taking into account the rheological characteristics and the required mechanical performances. Rate of addition is generally in the range of 0.8-1.8% by wt of cementitious material. For maximum dispersion throughout the mix, CHRYSO®Optima K9313 should be added to the mixing water only. Should the product be added to fresh concrete, into the mixing truck, it is necessary to mix at high speed, and then at low speed (with a minimum 3 minutes at each speed)

Guideline Followed :

IS: 9103-2007 and ASTM C-494-2010(Type-G).

Shelf Life: If stored in unopened containers at normal ambient temperatures, a shelf-life of approximately 6 months.

Packaging

225 Kgs Barrel & bulk in 10 KL tanker

Safety

Before use, refer to the Material Safety Data Sheet. The MSDS is available on www.chryso.com.

The information contained in this technical data sheet is given to the best of our knowledge and the results from extensive testing in order to remain as objective as possible. However, it cannot, in any case be considered as a warranty involving our liability in case of misuse or any different use of our products from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our website **www.chryso.com**



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