

# CHRYSO® Optima K912



## High Range New Generation Super Plasticizing Admixture

### Description

CHRYSO® Optima K912 is a new generation superplasticizer based on POLYCARBOXYLIC ETHER. It allows concrete to achieve targeted workability, while reducing water / cement ratio. It is developed to maintain fresh concrete workability without compromising setting time. CHRYSO® Optima K912 is especially adapted for Ready Mix Concrete and fluid concrete which require high short and long term strengths.

### Indicative characteristics

- Form : Light Amber Liquid
- Specific Gravity : 1.12 ± 0.02
- Air entrainment : ≤ 1.5 % over control mix.
- pH : ≥ 6
- Chloride Content : Nil, as per BS - 5075 (Part-I)
- Compatibility : OPC, PSC, SRC & PPC.

### Advantages :

Thanks to specifically designed molecular structure, CHRYSO® Optima K912 enables the concrete manufacturer to produce cohesive, low viscous concrete with long workability retention. Thereby green concrete can be hauled for longer distances and still be placed conveniently around congested reinforcement. Reduces thixotropy of the mix without risk of segregation. 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 30%) 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 15% to 25%, can be achieved.

### Domains of application

- All cement types
- Pumped concrete
- Workability retention
- Ready mix concrete
- Concrete for highly reinforced structures
- 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 0.2-1.5% by wt of cementitious material. For maximum dispersion throughout the mix, CHRYSO® Optima K912 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](http://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](http://www.chryso.com)

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