

# CHRYSO®Optima 224

## High range water reducing Super plasticizing admixture



**CHRYSO®Optima 224** is a new generation superplasticizer, based on modified polycarboxylate, particularly recommended for ready mix concrete and civil engineering construction.

**CHRYSO®Optima 224** intends to create a high water reduction and/or an increased period of workability retention. It allows to manufacture concrete with a long workability retention without prejudicial set retarding effect. Thus, **CHRYSO®Optima 224** may be used in a large concrete range.

**CHRYSO®Optima 224** is particularly adapted to homogeneous SCC formulations with a high filling capacity.

**CHRYSO®Optima 224** is compatible with most cements.

### Indicative characteristics

- Nature: liquid
- Colour: Brown
- Shelf life: 9 months

### Specifications

- Specific gravity (20°C):  $1,050 \pm 0,020$
- pH:  $4,70 \pm 1,00$
- Solid content (halogen):  $21,50\% \pm 1,00\%$
- Solid content (EN 480-8):  $21,40\% \pm 1,00\%$
- Na<sub>2</sub>O equivalent:  $\leq 1,00\%$
- Cl<sup>-</sup> ions content:  $\leq 0,10\%$

### Norms and regulations

- This product conforms to CE marking. The appropriate declaration can be found on our internet site.
- This product conforms to NF 085 certification, which technical specifications are those applied in the non harmonised part of NF EN 934-2.
- Adresse AFNOR - 11, Avenue de Pressensé - 93571 Saint Denis La Plaine Cedex

### Domains of application

- Self consolidating concrete
- Slump flow superior to 50 mm
- Ready-mix concrete
- Civil Engineering
- High Performance Concrete - Very High Performance Concrete

### Precautions

Protect from frost.  
Should the product freeze, it will recover its properties. After thawing, an efficient agitation is necessary until the product is entirely homogeneous again.

### Method of use

Dosage: 0.3 to 2.5 kg for 100 kg of cement.

This product must be added to the mixing water or at the end of the mixing cycle.

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 of 3 minutes, at each speed).

The optimum dosage of this product can only be



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established after trial tests, taking into account the rheological characteristics and the required mechanical performances of the concrete.

Dependant on application this product can be used in conjunction with some other CHRYSO® admixtures.

### Safety

This product is classified as "harmless". In case of exposure, it is recommended to wear your protective equipment.

Before use, refer to the safety data sheet on our internet site [www.chryso.com](http://www.chryso.com)