# **TECHNICAL DATA SHEET**

# CHRYSO®Premia CQ 163

High range water reducing Super plasticizing admixture for High Early Strength Concrete





### **DESCRIPTION**

CHRYSO® Premia CQ 163 is a new generation superplasticizer high range water reducer, based on modified polycarboxylate polymers.

CHRYSO® Premia CQ 163 is especially recommended for concrete requiring high early age and long term strengths, while maintaining the workability and superior performances for concrete containing supplementary cementitious materials, such as GGBS, Fly Ash, silica fume.

CHRYSO® Premia CQ 163 enables the production of concrete with low water to cement ratio or high fines content concrete such as Self Compacting Concrete (SCC).

CHRYSO® Premia CQ 163 allows for outstanding placeability and finishing properties.

### **BENEFITS**

- Dramatically increases early compressive and flexural strengths without detriment to ultimate strengths.
- Improves the efficiency of cement and supplementary cementitious materials in concrete, effectively reducing the quantity of cement required to achieve specified concrete properties. Better cement efficiency means less CO<sub>2</sub> pollution.
- Thanks to its short term performances, CHRYSO®Premia CQ 163 allows either to reduce the time before demoulding or to save energy by decreasing temperature or time of steam curing.

#### **PACKAGING**

- IBC 1000L
- Bulk delivery on request

## FIELDS OF APPLICATION

CHRYSO®Premia CQ 163 is recommended for all concrete mixes where low water content, improved cementitious material performance (more Mpa/kg), accelerated set times, reduced curing costs and very high early strengths characteristics are desirable.

- All cement types
- Precast
- Use of Supplementary Cementitious Materials
- Concrete for highly reinforced structures
- High Performance Concrete Very High Performance Concrete
- Prestressed concrete
- Ready-mix concrete
- High early and ultimate strength
- Plastic or fluid concretes
- Pumped concrete
- Self consolidating concrete
- etc



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## INDICATIVE INFORMATION

Product Nature	liquid
Color	Pale yellow
Lifetime	12 months
Specific gravity	1,080 ± 0,020
pH	4,00 ± 2,00

Cl<sup>-</sup> ion content: nil to EN 934 and BS 5075.

### METHOD OF USE

0.3 to 3.0 kg for 100 kg of cement.

- The optimum dosage of this product can only be established after trial tests, taking into account the rheological characteristics and the required mechanical performances of
- It can be added: either within mixing water, or at the end of the mixing cycle (extra mixing time) - or gradually: part in the water before mixing, part during 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).
- Dosage rates of CHRYSO®Premia CQ 163 are dependent upon desired concrete performance characteristics and variables including cement quantity and chemistry, concrete temperature and curing conditions.
- Because local job conditions vary, please contact your local CHRYSO sales representative for further assistance if using outside recommended dosage ranges.

### **PRECAUTIONS**

- Protect from frost.
- Use at a temperature above 0° C.
- Should the product freeze, it will recover its properties. After thawing, an efficient agitation is necessary until the product is entirely homogeneous again.

### Compatibility:

- CHRYSO®Premia CQ 163 is compatible with all types of Portland cement, class C and F fly ash, GGBS, microsilica, fibers and approved air entraining admixtures.
- CHRYSO®Premia CQ 163 is compatible with other CHRYSO admixtures when used in the same concrete mix, but should be added to the mix separately and must not be mixed together prior to addition.

# NORMATIVE AND REGULATORY **INFORMATION**

This product conforms to ASTM C 494 Type F, and BSEN 934 2

#### **SAFETY**

CHRYSO® Premia CQ 163 is not considered dangerous to handle. Prior to any use, please read carefully the Material Safety Data Sheets.

