

CHRYSO®Optima CQ 40

New Generation, high range water reducing/
superplasticizing admixture



DESCRIPTION

CHRYSO®Optima CQ 40 is a new generation superplasticizer based on modified polycarboxylate and synthetic polymers. Thanks to its specifically designed molecular structure, **CHRYSO®Optima CQ 40** enables the concrete manufacturer to produce cohesive, low viscous concrete with long workability retention.

CHRYSO®Optima CQ 40 has been developed to maintain fresh concrete workability without compromising the setting time. **CHRYSO®Optima CQ 40** can be used in self-levelling concrete production.

BENEFITS

- **CHRYSO®Optima CQ 40** allows concrete with the required workability to be obtained while reducing the water/cement ratio.
- Enhances the workability retention of concrete in hot climates.
- The excellent dispersion properties of **CHRYSO®Optima CQ 40** allow the user to optimise the cement content with reference to the specified concrete strength.
- With all these characteristics, **CHRYSO®Optima CQ 40** is a superplasticizer which is particularly adapted for usage in construction jobsites and in the ready-mix concrete industry.

PACKAGING

- IBC 1000L
- Bulk delivery on request

FIELDS OF APPLICATION

CHRYSO®Optima CQ 40 is recommended for all concrete mixes where low water content, improved cementitious material performance, high workability retention and very high strengths characteristics are desirable.

- All cement types
- Precast elements
- Concrete for highly reinforced structures
- High Performance Concrete - Very High Performance Concrete
- Prestressed concrete
- Ready-mix concrete
- Extended workability retention
- High early and ultimate strength
- Hot weather concreting
- Pumped concrete
- Self levelling concrete

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INDICATIVE INFORMATION

Product Nature	liquid
Color	Pale yellow
Lifetime	12 months
Specific gravity	1,067 ± 0,020
pH	5,00 ± 2,00

Cl⁻ ion content: nil to EN 934 and BS 5075.

METHOD OF USE

0.5 to 2 litres 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 the concrete.
- 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® Optima CQ 40** 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® Optima CQ 40** is compatible with all types of Portland cement, class C and F fly ash, GGBS, microsilica, fibers and approved air entraining admixtures.
- **CHRYSO® Optima CQ 40** 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, and BSEN 934-2

SAFETY

CHRYSO® Optima CQ 40 is not considered dangerous to handle. Prior to any use, please read carefully the Material Safety Data Sheets.