

CHRYSO®Optima 1105

New Generation, high range water reducing/
superplasticizing admixture



DESCRIPTION

CHRYSO®Optima 1000 range is the new breakthrough from CHRYSO. This technology is dedicated for the design of tailor-made superplasticizing solutions for jobsite.

CHRYSO®Optima 1105 is a new generation superplasticizer, high-range water reducer, based on modified polycarboxylate polymers.

CHRYSO®Optima 1105 is especially recommended for concrete requiring high early age strengths, while maintaining the workability.

CHRYSO®Optima 1105 enables the production of self-compacting concrete (SCC).

BENEFITS

- Thanks to its specifically designed molecular structure, **CHRYSO®Optima 1105** enables the concrete manufacturer to produce cohesive, low viscous concrete with long workability retention.
- **CHRYSO®Optima 1105** provides concrete with a high workability, while reducing the water/cement ratio.
- **CHRYSO®Optima 1105** has been developed to maintain fresh concrete workability together with high early strength.
- **CHRYSO®Optima 1105** is therefore an admixture which is particularly suited for jobsite and ready mix industry.

PACKAGING

- IBC 1000L
- Bulk delivery on request

FIELDS OF APPLICATION

CHRYSO®Optima 1105 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
- Use of Supplementary Cementitious Materials
- Concrete for highly reinforced structures
- High Performance Concrete - Very High Performance Concrete
- Ready-mix concrete
- Extended workability retention
- High early and ultimate strength
- Hot weather concreting
- 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	1,090 ± 0,020
pH	4,00 ± 2,00

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

METHOD OF USE

0.3 to 2.5 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 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 1105** 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 1105** is compatible with all types of Portland cement, class C and F fly ash, GGBS, microsilica, fibers and approved air entraining admixtures.
- **CHRYSO®Optima 1105** 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 1105 is not considered dangerous to handle. Prior to any use, please read carefully the Material Safety Data Sheets.