# CHRYSO®Optima 100 CHRYSO®Optima 100



# HRWR – Extreme Rheology Enhancer

### **■** Features

**CHRYSO®Optima 100** is a new generation high range water reducing admixture based on CHRYSO patented technology: APP.

CHRYSO®Optima 100 is formulated specifically to maintain high workability and decrease mix stickiness for superior placeability and finishing.

CHRYSO®Optima 100 exclusive technology allows for extreme easiness of use and robustness.

**CHRYSO®Optima 100** is manufactured under rigid quality control measures to provide uniform, reliable results.

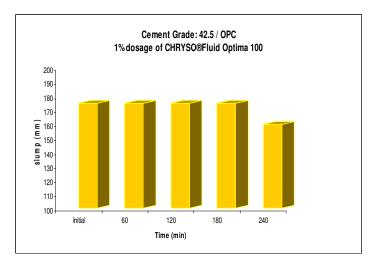
#### Benefits

- Provides extreme workability retention, but not retardation, depend on the dosage, cementitious content / type and mix design.
- Provides increased slump and flowability without increased water content.
- Improves finish, no cold joints due to extended workability properties, reduces cracking and shrinkage.
- Improves concrete quality by reducing the water-cement ratio for a given degree of workability.
- Proprietary molecule reduces concrete viscosity (stickiness) allowing for easier placement, better finish and enhanced pumpability.
- Improves concrete chemical resistance and durability

## ■ Areas of Application

**CHRYSO®Optima 100** is recommended for all concrete mixes where significant water reduction, improved cementitious material performance (more Mpa/Kg), improved finishing and enhanced slump retention characteristics are desirable.

**CHRYSO®Optima 100** is especially recommended for use in ready mixed concrete applications where low stickiness and superior workability retention characteristics are required.







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### **Characteristics:**

Physical state: liquid
Color: milky, off white
Density: 1.05 ± 0.02

• pH: 5 ± 2

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

• Na2O equiv.: < 1.0%

**CHRYSO®Optima 100** does not contain any purposely added calcium chloride or other chloride based components. It will not promote or contribute to corrosion of reinforcing steel in concrete.

#### Packaging:

IBC: 1000 LDrums: 200 L

#### Standard specifications:

Conforms to ASTM C 494 type A & G

## Directions for use:

Dosage

CHRYSO®Optima 100 is recommended for use at a dosage rate of 0.3 to 5 Kg per 100 Kg of cement.

The optimum dosage of **CHRYSO®Optima 100** can only be established after trial tests, taking into account local conditions, materials and specification requirements.

**CHRYSO®Optima 100** can be added at the concrete plant or on the job site. In case of addition in a mixing truck, it is recommended that the concrete be mixed at high speed for 1 minute per cubic yard of concrete (with a minimum of 6 min.).

Because local job conditions vary, please contact your local CHRYSO sales representative for further assistance if using outside recommended dosage ranges.

#### Compatibility:

**CHRYSO®Optima 100** is compatible with all types of Portland cement, class C and F fly ash, slag, microsilica, calcium chloride, fibers and approved air entraining admixtures.

**CHRYSO®Optima 100** can be used in all white, colored, and architectural concrete. For best results, each admixture must be dispensed separately into the concrete mix.

#### **Precaution:**

CHRYSO®Optima 100 may freeze at temperatures below 2° C. Although freezing does not harm CHRYSO®Optima 100 , precautions should be taken to protect it from freezing.

If **CHRYSO®Optima 100** should happen to freeze, thaw and reconstitute with mechanical agitation. This product must be stored in plastic containers, except those manufactured with PVC. Shelf life: 9 months.

#### ■ Safety:

**CHRYSO®Optima 100** is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

#### **About CHRYSO:**

Worldwide leader for cement and concrete additives for over 70 years, **CHRYSO** has been designing, producing, specifying and delivering its added-value solutions to the construction professionals with outstanding innovation and quality service. As a result, **CHRYSO**'s brand and products have been associated with the most prestigious and demanding construction projects over the globe.

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