

# CHRYSO®Premia IR 199

## CHRYSO®Premia IR 199



### Superplasticizer – High Range Water Reducer

#### ■ Features

**CHRYSO®Premia IR 199** is a new generation superplasticizer – high range water reducer, based on modified polycarboxylate.

**CHRYSO®Premia IR 199** is especially recommended for concrete requiring high early age and long term strengths, whilst maintaining the workability.

**CHRYSO®Premia IR 199** enables the production of concrete with very low W/C ratios.

**CHRYSO®Premia IR 199** enables the production of self-levelling concrete.

#### ■ Benefits

- Dramatically increases early compressive and flexural strengths without detriment to ultimate strengths
- The dispersion properties of **CHRYSO®Premia IR 199** allow the user to optimise the cement content when a specified mechanical strength is required.
- Thanks to its short term performances, **CHRYSO®Premia IR 199** allow whether to reduce the time before demolding or to save energy by decreasing temperature or time of steam curing.

#### ■ Areas of Application

**CHRYSO®Premia IR 199** is recommended for all concrete mixes where water content, improved cementitious material performance (more psi/lb) accelerated set times, reduced curing costs and very high early strengths characteristics are desirable.

**CHRYSO®Premia IR 199** is especially adapted for any concrete application requiring increased early compressive or flexural strengths without detriment to ultimate strengths.

1. All types of cement
2. Heavy prefabrication
3. High performance concrete, ultra high performance concrete
4. Pre-stressed concrete
5. Pre-Cast concrete
6. Concrete of humid, plastic or fluid consistency
7. Self-levelling concrete
8. High strength concrete with workability retention

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### ■ Description:

#### Characteristics:

**CHRYSO®Premia IR 199** is a chemically stable liquid.

1. Nature : liquid
2. Colour : Milky Green / Grey
3. Density :  $1.055 \pm 0.020$
4. pH :  $6.5 \pm 2$
5.  $\text{Cl}^-$  ion content : nil to EN 934 and BS 5075
6.  $\text{Na}_2\text{O}$  equiv. :  $\leq 1.5 \%$

**CHRYSO®Premia IR 199** 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:

- Bulk
- IBC: 1000 L
- Drums : 215 L
- Pails: 20 L

#### Standard specifications:

Conforms to ASTM C 494 Type A, E and F and BS EN 934-2

### ■ Directions for use:

#### Dosage

between 0.3 and 3.00 kg per 100 kg of cement. A 0.8 % dosage of the product to the weight of cement is commonly used.

**CHRYSO®Premia IR 199** can be added to the water before mixing the concrete. However, it can be added to the concrete after mixing.

Dosage rates of **CHRYSO®Premia IR 199** 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.

#### Compatibility

**CHRYSO®Premia IR 199** is compatible with all types of Portland cement, class C and F fly ash, slag, microsilica, calcium chloride, fibers and approved air entraining admixtures.

#### Precaution:

- Store away from frost. Use **CHRYSO®Premia IR 199** at a temperature superior to  $0^\circ\text{C}$ .
- Should the product freeze, its properties can be recovered after thawing and agitating thoroughly.
- This product must be stored in plastic containers, but not in PVC.
- Shelf life: 12 months.

#### ■ Safety:

**CHRYSO®Premia IR 199** 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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