### CHR/SO INNOVATION IS OUR CHEMISTRY

# CHRYSO®Tard CHR CHRYSO®Tard CHR



### Set Retarder - Stabilizer

#### Description

CHRYSO®Tard CHR slows down the hydration of cement by momentarily blocking the surface of the cement particles. At the end of setting, the concrete hardens rapidly and high compressive strength is obtained after 28 days.

CHRYSO®Tard CHR has no surface tension effects. Its use in concrete modifies in no way the consistency of concrete.

CHRYSO®Tard CHR can be used simultaneously with high range water reducing superplasticizers.

#### Conformity

**CHRYSO®Tard CHR** is a set retarder which conforms to CE Marking. The appropriate declaration can be found on our internet site.

CHRYSO®Tard CHR is a set retarder which conforms to NF EN 934-2. CHRYSO®Tard CHR also conforms to ASTM C 494-B.

#### Areas of Application

- 1. All types of cement
- 2. Mass concrete and tiling mortar
- 3. Mortar
- 4. Piles, diaphragm walls and RCC
- 5. Pouring of concrete at high temperature
- 6. Transport of concrete over long distances
- 7. Cold joints prevention

#### Method of use

Dosage: 0.2 to 1.0 kg per 100 kg of cement. For different dosages, please contact our specialists.

CHRYSO®Tard CHR is completely miscible in water. It must be added to the mixing water.

• The retarding effect of CHRYSO®Tard CHR is proportional to the dosage used. The optimum dosage of CHRYSO®Tard CHR can only be established after trial tests, taking into account local conditions affecting the workability of the mix and the mechanical properties required from the concrete.





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#### **Characteristics:**

CHRYSO®Tard CHR is a chemically stable liquid.

Nature:	liquid
Colour:	Brown
Density:	$1.06\pm0.020$
pH:	$7\pm2$
CI-ions content:	nil to EN 934 and BS 5075

CHRYSO®Tard CHR 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 L -Drums: 200 L

#### References

- 1. Cairo Metro
- 2. Channel Tunnel

#### Application Test:

#### Compatibility:

**CHRYSO®Tard CHR** is compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, calcium chloride, fibers and approved air entraining admixtures.

#### Precaution:

• Store away from frost. Use CHRYSO®Tard CHR at a temperature superior to 0°C.

• Should the product freeze, its properties can be recovered after thawing and agitating thoroughly.

- · Shelf life: 18 months.
- Safety

CHRYSO®Tard CHR is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

Example of results obtained according to the methods defined in the NF-EN 480-1 European certification. Type of concrete 1 using Cement grade 52.5 N (SSB : 3200 - 4000 cm<sup>2</sup>/g and C3A : 7-11%).

	Workability	Strength (MPa)					
		7 days	28 days		Initial set	Final set	Set extension
Control	Slump 6 cm	29.1	35.1	Control	4 h 08	7 h 00	2 h 52
Control + 0.27% CHRYSO <sup>®</sup> Tard CHR	Slump 6 cm	30.0	36.5	Control + 0.27% CHRYSO®Tard CHR	5 h 58	10 h 13	4 h 15
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#### 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.

#### **CHRYSO Gulf LLC**

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The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty involving our liability in the case of misuse. Tests should be conducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs.