CHRYSO[®] Fluid Optima 277 CHRYSO[®] Fluid Optima 277



Superplasticizer – High Range Water Reducer

Features

CHRYSO[®]Fluid Optima 277 is a new generation superplasticizer – high range water reducer, based on modified polycarboxylate.

CHRYSO[®]Fluid Optima 277 is especially recommended for concrete requiring high early age and long term strengths, whilst maintaining the workability.

 $\mathsf{CHRYSO}^{\circledast}\mathsf{Fluid}$ Optima 277 enables the production of concrete with very low W/C ratios.

CHRYSO®Fluid Optima 277 enables the production of self-leveling concrete.

Benefits

- Enhances the workability retention of concrete in hot climates.
- High water reduction ability.
- The dispersion properties of CHRYSO[®]Fluid Optima 277 allow the user to optimise the cement content when a specified mechanical strength is required.

Areas of Application

CHRYSO[®]Fluid Optima 277 is recommended for all concrete mixes where water content, improved cementitious material performance, high workability retention and very high strengths characteristics are desirable.

- 1. All types of cement
- 2. Heavy prefabrication
- 3. High performance concrete, ultra high performance concrete
- 4. Pre-stressed concrete
- 5. Ready-mix concrete
- 6. Concrete of humid, plastic or fluid consistency
- 7. Self-levelling concrete
- 8. High strength concrete with high workability retention
- 9. Compatible with Micro silica, GGBS and Fly Ash.



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Description:

CHRYSO[®]Fluid Optima 277 is a chemically stable liquid.

 $\label{eq:constraint} \begin{array}{l} 1.Nature: liquid\\ 2.Colour: Yellow\\ 3.Density: 1.1 \pm 0.020\\ 4.pH: 6 \pm 1.5\\ 5.CI^{-} \mbox{ ion content}: \leq 0.1 \ \%\\ 6.Na_2O \ equiv.: \leq 1.0 \ \% \end{array}$

CHRYSO[®]Fluid Optima 277 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
Cubitainers: 1000 L
Plastic barrels : 215 L
Drums: 60 L
Standard specifications:
Conforms to ASTM C 494 Type A, F and G

Directions for use:

Dosage

between 0.3 and 2.0 kg per 100 kg of cement. A 0.8 % dosage of the product to the weight of cement is Commonly used.

CHRYSO[®]Fluid Optima 277 can be added to the water before mixing the concrete. However, it can be added to the concrete after mixing.

Dosage rates of CHRYSO[®]Fluid Optima 277 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[®]Fluid Optima 277 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®Fluid Optima 277 at a temperature superior to 0°C.

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

 \bullet This product must be stored in plastic containers, but not in PVC.

· Shelf life: 12 months.

Safety:

CHRYSO[®]Fluid Optima 277 is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

About CHRYSO:

CHRYSO is a subsidiary of the multi-billion dollar specialty construction chemicals Group, Materis.

Worldwide leader for Concrete and Cement additives, CHRYSO has been servicing the construction Industry for over half a century with outstanding innovation and service.

As a result, CHRYSO's name and products have been associated with the most prestigious and demanding construction projects worldwide.



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.