

# CHRYSO® Optima SL 181

## CHRYSO® Optima SL 181



### Superplasticizer – High Range Water Reducer

#### ■ Features

**CHRYSO® Optima SL 181** is a new generation superplasticizer based on polycarboxylate and modified phosphonate.

Thanks to its specifically designed molecular structure, **CHRYSO® Optima SL 181** enables the concrete manufacturer to produce cohesive, low viscous concrete with long workability retention.

**CHRYSO® Optima SL 181** enables the production of concrete with very low water/cement ratios, high strength concrete with improved workability retention and no delayed setting time characteristics.

**CHRYSO® Optima SL 181** enables the production of self-levelling concrete.

#### ■ Benefits

- Enhances the workability retention of concrete in hot climates.
- High water reduction ability
- The dispersion properties of **CHRYSO® Optima SL 181** allow the user to optimise the cement content when a specified mechanical strength is required.

#### ■ Areas of Application

**CHRYSO® Optima SL 181** 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 workability retention
9. Compatible with Micro silica, GGBS and Fly Ash.
10. Extended workability concrete
11. White or pale concrete

# CHRYSO® Optima SL 181

## CHRYSO® Optima SL 181

### ■ Description:

#### Characteristics:

**CHRYSO® Optima SL 181** is a chemically stable liquid.

1. Nature : liquid
2. Colour : Pale Yellow
3. Density :  $1.070 \pm 0.020$
4. pH :  $5.0 \pm 2$
5.  $Cl^-$  ion content : nil to EN 934 and BS 5075

**CHRYSO® Optima SL 181** 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

#### Standard specifications:

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

### ■ Directions for use:

#### Dosage

Between 0.3 and 2.5 kg per 100 kg of cement. A 1.0 % dosage of the product to the weight of cement is commonly used.

**CHRYSO® Optima SL 181** can be added to the water before mixing the concrete. However, it can be added to the concrete after mixing.

Dosage rates of **CHRYSO® Optima SL 181** 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® Optima SL 181** 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® Optima SL 181** at a temperature superior to 0°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® Optima SL 181** 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.

**CHRYSO Lanka (Pvt) Ltd**  
 531/1 Negombo Road, Seeduwa, Sri Lanka  
 Tel: +94 11 225 1504 Fax: +94 11 225 1508  
 Email: info@chryso.lk

