Revision number: 3
Date: 2019/12/09
Supercedes: 2010/06/01

Technical data sheet

CHRYSO® Plast CER

Water Reducing Plasticiser

Description

Due to its specific formula, **CHRYSO®Plast CER** is an additive which results in an increased dispersion of the particles in concrete.

Standards

- **CHRYSO®Plast CER** conforms to the requirements of SANS 50934-2 (EN 934-2) Table 2). These requirements are approximate equivalents of ASTM C494 Type A and D.

Advantages

- **CHRYSO®Plast CER** optimises the dosage of cement necessary to obtain a given compressive strength. For an equivalent plasticity and after reducing the quantity of mixing water:
  - the concrete is denser,
  - there is reduced capillary action,
  - depending on the dosage, there is an increase in compressive strength after 24 hours.
- **CHRYSO®Plast CER** has water repellent properties and can therefore be used to reduce the permeability of concrete.
- Using **CHRYSO®Plast CER** also improves the waterproofing of concrete.

Application guidelines

Use

- All types of cement
- Ready-mix concrete with stable workability
- Heavy prefabricated elements
- Pre-stressed and pumped concrete
- Reinforced concrete in general

Physical and chemical properties

- Physical state(@25°C): liquid
- Specific gravity (@25°C): 1.130 (±0.010)
- Colour: light brown
- pH: 6.0 (±1.0)
- Viscosity(@25°C): 10 -15 secs (ford#4 cup)
- Cl^- ions content < 0,1%
- Na_2O equivalent: ≤ 3.5%
- Solubility in water: miscible

Dosage

- The optimum dosage of **CHRYSO®Plast CER** can only be established by using trial tests, taking into account local conditions affecting the workability of the fresh mix and the mechanical properties required of the concrete.
- Range:
  - By volume: 0.18 to 0.71 litres per 100 kg of cementitious material (including extenders)
  - By weight: 0.2 to 0.8 kg per 100 kg cementitious material (including extenders)
- 0.3% dosage of the product to the weight of cement is commonly used.
- From 0.2 to 0.35% the water reducing effect is dominant.
- Above 0.35%, there is a secondary retarding effect.

Dispensing/mixing

- **CHRYSO®Plast 900** is completely miscible in water. It must be added to the mixing water.

CHRYSO Southern Africa (Pty) Ltd.
Gauteng (head office): 26 Malcolm Moodie, Crescent, Jet Park
Sharecall facility: 0861 CHRYSO | T: +27(0)11 395 9700 | F: +27(0)11 397 6644 | W: za.chryso.com

Technical data sheet

CHRYSO® Plast CER

Water Reducing Plasticiser

Storage

- **CHRYSO®Plast CER** has a shelf life of 18 months starting from the manufacturing date – provided no other chemicals are added to it.
- The product should be stored away from rain and frost in clean, dry tanks.
- After freezing, the properties of **CHRYSO®Plast CER** can be recovered by controlled thawing and agitation.

Packaging

- 25 ℓ jerry can
- 200 ℓ drum
- 1000 ℓ flow bin
- Bulk delivery on request

Health and safety

- This product is classified as harmless. CHRYSO will provide onsite assistance when requested.
- For more information, please refer to the material safety data sheet.

CHRYSO Southern Africa (Pty) Ltd.
Gauteng (head office): 26 Malcolm Moodie, Crescent, Jet Park
Sharecall facility: 0861 CHRYSO | T: +27(0)11 395 9700 | F: +27(0)11 397 6644 | W: za.chryso.com