

Technical data sheet

CHRYSO® Fluid Premia 372

New generation, high range water reducing/superplasticising admixture

Description

CHRYSO® Fluid Premia 370 is classified as a high range water reducing/superplasticising admixture. The admixture thus induces the following major effects in a concrete mix:

- Without affecting the consistence (workability), permits a high reduction in the water content of a given concrete mix or
- Without affecting the water content, increases the slump/flow considerably or
- Produces both effects simultaneously.

Standards

- CHRYSO® Fluid Premia 370 conforms to the requirements of SANS 50934-2 (EN 934-2) and ASTM C494 Type F.

Advantages

- Can be used to manufacture a wide range of concrete.
- CHRYSO® Fluid Premia 370 is compatible with most types of cement.
- The early compressive strength of concrete is increased as a direct result of the lower water/cement ratio.
- Assists in the placing of concrete (even without a vibrator).

Application guidelines

Use

- Pre-stressed concrete
- Readymix concrete
- Precast concrete
- Industrial beams
- Slab bases

Physical and chemical properties

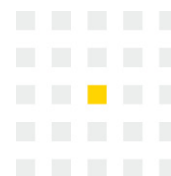
- Physical state(@25°C): liquid
- Specific gravity (@25°C): 1.060
- Colour: clear/light brown
- pH: 4
- Viscosity(@25°C): 20 secs (ford#4 cup)
- Solubility in water: miscible

Dosage

- The optimum dosage of CHRYSO® Fluid Premia 370 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: 0.23 to 1 litre per 100 kg of cementitious material (including extenders)
 - By weight: 0.24 to 2 kg per 100 kg cementitious material (including extenders)
- Typical:
 - By volume: 0.23 to 1.87 l per 100 kg of cementitious material (including extenders)
 - By weight: 0.25 to 2 kg per 100 kg cementitious material (including extenders)

Dispensing/mixing

- CHRYSO® Fluid Premia 370 is completely miscible in water.
- CHRYSO® Fluid Premia 370 should never be added to dry cement or to components of a mix that are dry.



Technical data sheet

CHRYSO® Fluid Premia 372

New generation, high range water reducing/superplasticising admixture

- CHRYSO® Fluid Premia 370 can be added to concrete using one of the following methods:
 - To the gauge water before mixing: CHRYSO® Fluid Premia 370 should be added to approximately 90% of the concrete's total gauge water requirement (including admixture). The remaining 10% of the concrete's total gauge water requirement (without admixture) should be added in small increments until the target concrete workability is achieved.
 - As a component of the mixing process: Should be added simultaneously with approximately 90% of the concrete's total gauge water requirement.
 - To freshly mixed concrete in a ready-mix truck drum: Reverse the ready-mix truck drum to discharge at very slow revolutions. When the concrete reaches the mouth of the drum, stop the drum. Place CHRYSO® Fluid Premia 370 on the concrete and not onto any exposed surface of the drum interior. Change the direction of the drum to mixing and ensure that all material has moved to the bottom of the drum. Repeat a minimum of 2 more times (preferably 3), the reverse to discharge at very slow revolutions, until the concrete reaches the mouth of the drum and then change to mixing until the concrete has moved to the bottom of the drum - to ensure that all of the internal upper drum surfaces have been cleared of admixture and to ensure a more effective dispersion of admixture during actual mixing. When completed, thoroughly mix the concrete at maximum permissible drum rpm, in order to ensure effective dispersion of CHRYSO® Fluid Premia 370 throughout the concrete. (a minimum of 1minute per cubic metre of concrete; therefore 6 cubic metres = minimum 6 minutes). After completion of mixing at maximum rpm and before discharge, allow the concrete to agitate for

1 - 3 minutes at very low drum rpm (travel rpm).

Storage

- CHRYSO® Fluid Premia 370 has a shelf life of 12 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® Fluid Premia 370 can be recovered by controlled thawing and agitation.
- Do not allow the product to be in high temperatures for long periods of time.

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.

Disclaimer: The information contained in this document is given to the best of CHRYSO's knowledge and is the result of extensive testing. However, this document will not under any circumstances be considered as a warranty involving CHRYSO's liability in case of misuse. Tests should be carried out before any use of the product to ensure that the methods and conditions of use of the product are satisfactory. CHRYSO specialists are at the disposal of the users in order to help them with any problems encountered.