Technical data sheet

CHRYSO® Xel 650

Set Accelerator



Description

CHRYSO®Xel 650 is a specific non-chloride formulation that promotes initial hydration of cements, particularly at low temperatures. The set is accelerated and compressive strength develops rapidly.

Application guidelines

Use

- All types of cement
- Shuttered concrete
- Pre-stressed concrete
- Precast elements
- Ready mix concrete
- Pouring of concrete in cold weather

Dosage

- Typical:
 - By volume: 0.4 to 2.5 litres per 100kg of cementitious material.
 - By weight: A 1.5% dosage of the product to the weight of cement is commonly used.
- The optimum dosage of CHRYSO®Xel 650 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.

Dispensing/mixing

- CHRYSO®Xel 650 is completely miscible in water.
- CHRYSO®Xel 650 must be added to the mixing water.

Physical and chemical properties

- Physical state(@25°C): liquid
- □ Specific gravity: 1.45 (±0.01)
- Colour: clear
- pH: 6.5 (±1.5)
- Viscosity(@25°C): 10 -14 secs (ford#4 cup)
- Freezing point: about -15 °C
- Na₂O equivalent: ≤ 2.7%

Tests

Example of results obtained according to the methods defined in the NF-EN 480-1 European certification. Type of concrete: Cement grade 42.5 (SSB: 3200 - 4000 cm²/g and C3A: 7-11%). Tests carried out for equal consistency.

	Water T °C	Initial set	Final set	Time taken to set
Control	0.5 at 5 °C	650 min	1380 min	730 min
1.7% wt/wt CHRYSO®Xel 650	0.5 at 5° C	300 min	778 min	478 min
	0.5 at 20° C	200 min	345 min	145 min

Storage

- CHRYSO®Xel 650 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.

Packaging

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



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Precautions

- CHRYSO®Xel 650 is slightly alkaline.
- Do not mix with acidic products.

Health and safety

- CHRYSO®Xel 650 is classified "Harmful". Whilst handling, it is obligatory to have skin and eye protection, avoid prolonged inhalation of the fumes.
- 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.