

## Technical data sheet

# CHRYSO® CWA 10

## Crystalline waterproofing admixture

### Description

**CHRYSO®CWA 10** is a crystalline waterproofing admixture in a dry powder form that is added to the concrete mix at the time of batching. Active ingredients of **CHRYSO®CWA 10** react with moisture to form crystals deep within the pores and capillary tract of the concrete structure. **CHRYSO®CWA 10** can transform an entire concrete structure into an impermeable water barrier with lasting integral waterproofing properties. Used to waterproof both the interior and exterior of building, **CHRYSO®CWA 10** prevents concrete decay and protects against moisture transmission, chemical attack and corrosion of reinforcing steel.

### Advantages

- **CHRYSO®CWA 10** can be used for positive and negative waterproofing of a structure.
- The product is ideal for concrete exposed to harsh conditions and enhances the durable properties of concrete as it protects the concrete from waterborne soluble salts
- Gives concrete crack sealing characteristics, it can seal hairline crack up to 0.4 mm wide
- **CHRYSO®CWA 10** is a permanent, non toxic product that is highly resistant to aggressive chemicals.
- An integral waterproofing system that is a permanent solution.
- The product can be added to concrete at the time of batching and is therefore not subject to climatic restraints.
- Process friendly and increases flexibility in construction scheduling.

### Physical and chemical properties

- Physical state: aggregated powder
- Colour: grey
- Alkali content: < 0.35% Na<sub>2</sub>O
- Specific gravity @ 25°C: > 1.3 bulk
- pH (working dilution): > 12
- Solubility of preparation in water: partially soluble

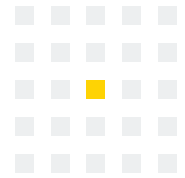
### Application guidelines

#### Areas of application

- Foundations.
- Sewerage and water treatment plants.
- Tunnels.
- Underground structures.
- Dams.
- Precast structures.
- Swimming pools.
- Reservoirs.
- Precast components.

#### Method and dosage

- As site conditions and temperature variations commonly occur, **CHRYSO's** technical department is readily available to tailor make mix designs and dosages according to a customer's requirements.
- The recommended dosage rate is between 0.8% and 1% of the cement weight.
- **CHRYSO®CWA 10** is added to concrete during the batching process. Directions may vary according to the type of batch plant operation and equipment used. Below are some typical mixing guidelines.



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- **Readymix plant wet** – the ratio must be 18 kg **CHRYSO®CWA 10** to 8.1 litres of water or 25 kg of **CHRYSO®CWA 10** to 11.3 litres of water this will form a slurry. Add to the wet concrete that is being batched in the truck to the required dosage of 0,8 or 1%. Batch the concrete as normal good practise requires, keeping in mind that the amount of water added to the CWA 10 slurry should be subtracted from the batching water that needs to be added. Mix for at least five minutes in order to make sure that **CHRYSO®CWA 10** is evenly distributed throughout the mix.  
**Readymix plant dry** – add **CHRYSO®CWA 10** directly to the drum of the dry mix truck and then thoroughly mix the admixture with half of the required aggregate. Add the water, making sure that the product is distributed evenly throughout the mix water. Add the remaining half of the water and aggregate.
- **Precast** – Add **CHRYSO®CWA 10** to coarse aggregate and fine aggregate and then mix thoroughly for two to three minutes before adding cement and water.
- The total quantity of the water to be added into the design mix should take into consideration the moisture content of both coarse and fine aggregates.
- The aggregate, cement and water should be batched according to standard practices.

### Precautions

- In order to achieve a homogenous mix, never add the dry powder of **CHRYSO®CWA 10** into a wet mix. This is because the **CHRYSO®CWA 10** powder will not disperse properly within the mix.
- Before adding **CHRYSO®CWA 10**, make sure that the concrete temperature of the mix is above 5°C.

### Storage

- If stored in an unopened bag in a cool, dry place – **CHRYSO®CWA 10** will have a shelf life of 12 months.

### Packaging

- 18 kg bag
- 25 kg bag

### Health and safety

**CHRYSO®CWA 10** is classified as an irritant. Refer to the materials safety data sheet. **CHRYSO** will provide onsite assistance if requested.

### Eyes

**CHRYSO®CWA 10** may cause significant irritation if splashed in or has any contact with a person's eyes hold the eyelids open and wash thoroughly with water.

### Skin

**CHRYSO®CWA 10** may cause significant skin irritation. Should the product have any contact with the skin, wash the affected area with soap and water. Obtain medical attention if irritation persists.

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.