

## Technical data sheet

# CHRYSO® ProFilm 19

## Finishing Aid – Evaporation Reducer.

### Description

**CHRYSO® ProFilm 19** protects fresh concrete from the effects of excessive moisture loss in rapid drying conditions, without increasing the bleed. This product is an evaporation reducer that is sprayed over fresh concrete surfaces. When applied, the water-based, VOC compliant product forms a continuous monomolecular film over the concrete surface.

### Advantages

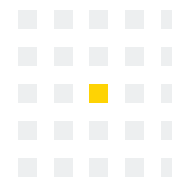
- **CHRYSO® ProFilm 19** is especially useful in weather that has a low humidity and is hot and windy as well as inside heated buildings during cold weather. This is because those conditions promote the rapid evaporation of surface moisture.
- The product enhances the durability of concrete because it helps to prevent map cracking and plastic shrinkage (where cracks can penetrate to the full depth of a concrete slab) by inhibiting the rapid loss of bleed water.
- This mono-molecular film lasts as long as the concrete remains plastic, despite floating and troweling operations.
- The product eliminates the need to add extra mixing water to the concrete mix design in order to compensate for rapid evaporation during finishing.
- **CHRYSO® ProFilm 19** is therefore ideal in concrete that produces little or no bleed water, such as mixes with low water content or mixes containing fibres.
- It also replaces the need for water spraying on the surface of the concrete in order to slow the evaporation process.

- Timing of the operations is less critical because it slows the evaporation rate down and allows the concrete to set uniformly. This increases the amount of surface area handled per concrete finisher.
- Since **CHRYSO® ProFilm 19** provides the concrete with adequate lubrication, it eliminates or reduces surface crusting, concrete sponginess, stickiness, concrete crazing and dusting that can cause an uneven and poor surface texture. **CHRYSO® ProFilm 19** assists in creating superior concrete flatwork finishes.
- **CHRYSO® ProFilm 19** does not affect the hydration process.
- **CHRYSO® ProFilm 19** will not affect the concrete colour.
- The product is classified as 'harmless' and is VOC compliant.
- **CHRYSO® ProFilm 19** contains a fugitive dye as a visual aid to ensure complete and uniform application. Treated surfaces are easily distinguished from un-treated surfaces – preventing potential over application. The dye disappears completely upon drying.

### Specifications

The use of a mono-molecular film to prevent the rapid drying of fresh concrete is recommended in the following American Concrete Institute (ACI) technical documents:

- ACI 305 R: Hot weather concreting
- ACI 302.1 R: Guide for concrete floor and slab construction
- ACI 308: Standard practice for concrete curing
- ACI 345 R: Guide for concrete highway bridge deck construction



## Technical data sheet

# CHRYSO® ProFilm 19

## Finishing Aid – Evaporation Reducer.

### Physical and chemical properties

- Physical state (25°C): liquid
- Colour: yellow – blue/green
- Specific gravity (25°C): 1 (±0.02)
- Calcium Chloride: nil

### Application guidelines

#### Use

- All horizontal concrete pours where the evaporation rate may exceed the bleeding rate of concrete
  - Industrial Floors
  - Roads
  - Bridge decks
  - Slabs
  - Patios
  - Driveways
  - Sidewalks

#### Dosage

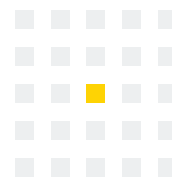
- CHRYSO® ProFilm 19 is already diluted, please do not dilute the product any further.
- Mix or agitate thoroughly in order to uniformly distribute the solids in the mixture.

### Method Statement

- CHRYSO® ProFilm 19 should be applied immediately after screeding.
- Using a hand or power sprayer, apply CHRYSO® ProFilm 19 uniformly over the surface of the plastic concrete.
- A litre of CHRYSO® ProFilm 19 has a coverage rate of roughly 6 m<sup>2</sup>.
- Under severe dry conditions, re-application may be required.
- Since CHRYSO® ProFilm 19 does not retard the setting characteristics of concrete, the normal timing of finishing operations must be maintained.

### Product notes

- CHRYSO® ProFilm 19 is not a curing compound, it is used to protect the concrete immediately after screeding until initial set has been reached. It cannot be used as a surface retarder or surface hardener. It must not be applied during any finishing operation. Please contact a CHRYSO representative for more information on our surface retarders and curing compounds.



## Technical data sheet

# CHRYSO® ProFilm 19

## Finishing Aid – Evaporation Reducer.

- If there is a spillage of **CHRYSO® ProFilm 19** on hardened concrete, wipe it immediately and then rinse the surface with water.
- If **CHRYSO® ProFilm 19** is allowed to dry on hardened concrete, a stain may appear. In order to remove the stain, one should place a cloth that is saturated with a household-type chlorinated bleach onto the stain. Cover the cloth in plastic. After an hour the stain should disappear. Rinse the area with water.

### Packaging

- 25 litre Jerry Can
- 210 litre Drum
- 1 000 litre Flobin

### Storage

- If stored in its original unopened container in dry warehouse conditions, **CHRYSO® ProFilm 19** (undiluted) has a shelf life of 18 months.
- The product may freeze at temperatures below 5°C.
- If the **CHRYSO® ProFilm 19** freezes, it will not go back into a solution and cannot be used again.
- If **CHRYSO® ProFilm 19** is diluted and stored for an extended period of time, then the product should be agitated before it is used.

### Health and safety

This product is classified as harmless. **CHRYSO** will provide onsite assistance when requested. 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 assist them with any problems encountered.