

CHEMfix 1

Cementitious Capillary Crystalline Waterproofing Coating

CHEMfix 1 is cement based non- toxic waterproofing system, which provides a permanent solution to water leakage, ingress or seepage in concrete structures or any cementitious substrates. Applied as a surface treatment, **CHEMfix 1** provides a deep seal penetration and protects against fresh and salt water under pressure.

CHEMfix 1 penetrates into the pores of the substrate by capillary action and is channeled to the lower depths of the concrete by the moisture that is present, this occurs even in the smallest pores and capillaries. The reaction between moisture and the active **CHEMfix 1** chemicals creates a continuous barrier of insoluble crystals. The crystal formation follows the water back as far as it is present in the structure. The capillaries are permanently blocked to the passage of water however vapor may pass allowing the structure to breathe.

Rate and penetration of crystal formation depends on the presence of free lime and the density of the concrete. Old concrete may have no free lime present and these needs to be determined prior to application. Seek advice prior to waterproofing old structures.

Area of application:

CHEMfix 1 is applied internally & externally, it can be used for any water retaining and water excluding applications including the Waterproofing and protection of:

Water- Retaining

Water tanks
Foundations
Canals
Dams
Swimming pools
Reservoirs

Water Excluding

Tunnels
Inspection pits
Foundation pile caps
Basements & Cellars
Construction joints
Lift shafts

TECHNICAL INFORMATION

Supply Form:	Powder
Color:	Gray
Bulk Density:	2.0Kg
Application Temp :	>5°C
Setting Time:	2-4 hours
Bonding Strength:	1.25 Mpa



Technical Datasheet

Directions for Use

Surface Preparation:

Surfaces to be treated must be free from dust, dirt, oil, grease, paint, curing compound or any previous surface treatment that will impair adhesion or inhibit penetration of the system. Remove any laitance and provide an open pored slightly rough surface.

Make good any areas of weak or unsound concrete. Dry concrete must be saturated for 24 hours prior to application. Surfaces should be damp at the time of application.

Mixing:

Mixing should be carried out using a forced action mixer such as a Cretangle or similar. Add the **CHEMfix 1** to the mixer and introduce clean water at the ratio of 1 part water to 2.25 - 2.50 parts **CHEMfix 1** by volume. Thoroughly mix to achieve a brush able consistency. Mix only sufficient material that can be used in 30-40 minutes. Do not re-temper with water.

Application:

CHEMfix 1 should be applied to the surface in contact with the water wherever possible. This will result in accelerated penetration and crystal formation.

CHEMfix 1 should be applied to the damp, prepared substrate by brush or spray at the rate of 1.0 kg/m² per coat. Apply the slurry in two coats, the second at right angles to the first. Second coat application should be 3-4 hours after the first dependant on temperature.

It is recommended that treated tanks and other water retaining structures are filled with water 24 hours after application of the second coat. Structures should remain filled for at least 7 days to facilitate crystal growth, which is accelerated by water pressure.

Packaging & Storage

CHEMfix 1 are supplied in 25 kg bags. Store as cement in shaded warehouses away from heat, humidity or moisture. Shelf life will be 12 months.

The information and recommendations above are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied in accordance with current best practice, national standards and our recommendations. As we have no control over site conditions or methods of application, no liability can be derived from the contents of this information sheet, or from any written recommendations, or from any other advice offered. The user of the product is solely responsible for the product's suitability for the intended application and is recommended to test the suitability prior to use. We reserve the right to change the properties of our products without notice. All orders are sold subject to our current terms of sale and delivery. With the publication of this Technical Information Sheet all previous editions are no longer valid.

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