

## TECHFIN ACRYLIC CURE

### WATER BASED ACRYLIC EMULSION CONCRETE CURING COMPOUND

#### DESCRIPTION

TECHFIN ACRYLIC CURE is a water-based acrylic emulsion of milky appearance which dries to a colourless, stain-free surface finish when applied to newly cast concrete. The product is ready to use, has exceptional grab character and develops a tenacious bond to the host substrate and is applied to concrete surfaces following the final finishing or stripping of forms. TECHFIN ACRYLIC CURE may be used in external and internal applications and is unaffected by UV radiation.

#### ADVANTAGES

- Economical, single application
- Reduces incidence of shrinkage cracks
- Promotes better strength gain characteristics
- Bonds well to damp concrete
- Useful as a dust-proofer and surface hardener particularly on floor areas
- High curing efficiency
- Does not interfere with subsequent concrete surface treatments.
- Waterbased
- Cured film is clear and water repellent

#### APPLICATIONS

TECHFIN ACRYLIC CURE is an economical method of assisting efficient concrete curing. The presence and retention of water in concrete is essential to ensure adequate strength development and to minimize an initial plastic shrinkage crack development. Unlike conventional surface film forming membranes, TECHFIN ACRYLIC CURE acts chemically with the hydroxides produced by hydration of cement in concrete thus giving a dense, pore-filling, crystalline structure which in turn reduces the moisture evaporation rate from the concrete surface. It should be noted that whilst TECHFIN

ACRYLIC CURE is effective in improving moisture retention, the curing Efficiency Index is lower than that of conventional resin film-forming membranes. Therefore, where high curing efficiency Index Rates are required, the TECHFIN ACRYLIC CURE resin film-forming membrane compounds should be considered. Bear in mind that should subsequent surface coating be required, the time lapse involved with resin based membranes is substantially longer. This selection of the correct curing membrane grade is dependent on specification requirements and on job site conditions. For use on structures to receive potable water.

#### TECHNICAL DETAILS

Appearance	Milky white liquid
Specific gravity	1.0 @ 20°C
Flash Point	none
Curing efficiency	>55%
Finished Film	Clear, satin
Tensile strength	1.8 N/mm <sup>2</sup>
Shelf Life	1 year @ 20°C
Freezing Point	0°C
Chloride content	None
Toxicity	None
Coverage	8.5m <sup>2</sup> per liter

#### PACKAGING

TECHFIN ACRYLIC CURE is supplied in 25L and 200L drums

#### STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with these recommendations may result in the product undergoing premature deterioration and undesired results.

### WATCH POINTS

The main advantage in using TECHFIN ACRYLIC CURE is that it will not interfere in any way with subsequent surface treatments for concrete, i.e. paints, emulsions, sealants, adhesives, renders, tile adhesives, etc. Equipment should be cleaned with water after use.

**NOTE:** on over application, a slightly glassy concrete surface finish can result. Avoid storage conditions of extreme temperature and direct sunlight. Failure to comply with less than ideal storage conditions may result in premature deterioration of the product or packaging. Prolonged exposure of the product to the sun may result in decomposition of the TECHFIN ACRYLIC CURE characterized by an egg like smell. The product is unusable if this occurs and should be discarded accordingly. Avoid applications that are too thick. Subsequent coats must be at right angles to the previous coat.

### DIRECTIONS

TECHFIN ACRYLIC CURE is supplied ready to be used and should under no circumstances be diluted with water. TECHFIN ACRYLIC CURE should be spray applied to freshly cast horizontal concrete surfaces immediately after the initial surface water sheen has disappeared. For vertical surfaces the TECHFIN ACRYLIC CURE can be applied immediately to the "as stripped" concrete surface (there is no prerequisite to damp down the surface prior to application).

When hot drying winds prevail additional precautions such as wet hessian polythene or ponding should be employed and the area sheltered.

### COVERAGE

The recommended rate of application is 5-8m<sup>2</sup> per litre of product dependent on the substrate. TECHFIN ACRYLIC CURE has been tested to have a curing efficiency of 55% and greater. In favourable conditions such as shaded interior surfaces, adequate curing can be achieved with extended coverage rates.

### FILM BREAKDOWN

The longevity of the products membrane is dependent on a number of variables, which include film thickness, degree of exposure to weathering, traffic, UV light, and the porosity of the substrate concrete.

### SUBSEQUENT SURFACE FINISHES

It is recommended that prior to application of subsequent surface coats that the surface be abraded to ensure good and sufficient bonding. Perform a suitable pull-off test to ensure bonding is sufficient is abrading is not desired. TECHFIN ACRYLIC CURE is compatible with certain topcoats but not all finishing materials. Discretion is advised.

#### Gauteng

#### Kwa-Zulu Natal

#### Western Cape