

# Emcoril® AC (W)

# Ready to use, liquid membrane forming compound based on acrylic emulsions in water for curing concrete

# **Product Properties**

- · Emcoril® AC(W) protects freshly placed concrete against quick drying by acute sunrays, UV Resistant
- · Particularly suitable where early plastering is required
- Optimum hydration leading to stronger end hydration products
- Enables better quality control at sites
- · Does not affect the normal setting of cement
- · Minimizing the shrinkage cracks on account of curing at early stages
- Single application thereby saving of labor cost
- · Easy to Apply. Ideal for overhead curing and for curing of normally inaccessible places as in chimneys etc.
- · Ideal for curing at places having water shortage, eliminates the need for 28 days water spraying, hessian, PE films etc.
- · Better solar reflectance and helps lower the temperature of concrete
- · Heals Micro-cracks in the concrete, needs no removal before subsequent treatment

# **Areas of Application**

- Emcoril® AC(W) can be used everywhere, where efficient curing is required. It is very suitable for large areas of concretes that are directly exposed to sunlight, heavy winds and other environmental influences.
- · Areas where early plastering is foreseen
- Concrete bridges
- · Canal linings and other structures
- Airport structures, motorways and harbors, port piers, etc.
- Dams and other irrigation related structures
- Roof Decks, slabs, retaining walls etc.
- · Over head patch repairs and inaccessible areas
- Chimneys, cooling towers and other tall structure

### **Application Notes**

#### General

The strength and durability of concrete does not only depend upon the correct composition and placing of concrete but also largely depends upon the correct curing. The principle of curing is to prevent the evaporation of the capillary water in the concrete so that sufficient water is available for complete hydration, which leads to better end hydration products and thereby avoid the surface dusting and plastic shrinkage.

The conventional methods of curing like water spraying, covering with wet burlaps, polyethylene sheets etc, are not only time consuming but also starts after the initial evaporation of water and after the appearance of the first cracks. The ideal curing technique should begin as soon as possible after the casting of concrete. Emcoril® AC(W) is an acrylic emulsion (in water) based membrane forming curing compound, to be brushed or sprayed on the fresh concrete only once, at initial stage which is the critical hardening period of concrete or mortar. It forms a seamless film on the surface of the fresh cast concrete and mortars, which arrests the evaporation of water from the capillaries and prevents quick drying of the concrete, thus avoiding the cracks and enabling the concrete to hydrate efficiently. Emcoril®AC(W) conforms to ASTM C 309.

#### Instruction for use

Emcoril® AC(W) should be applied as soon as possible after disappearance of water sheen from the surface.

The time period is preferably within about half an hour depending upon the temperatures. **Emcoril® AC(W)** should not be applied when standing water is present.

It is recommended to fog down the surface before application of Emcoril® AC(W). For curing of concrete that is retained on the formworks, the concrete should be wetted thoroughly after opening the shuttering and Emcoril® AC(W) should be sprayed or brushed. The application can be carried out using normal knapsack sprayers (insecticide tree sprayers) having suitable nozzle. In case of larger areas motorized continuous spraying devices can be used. The nozzle of the spraying device should be held about 0.7 to 1.0 m distance from the surface and it should be ensured that the complete area is covered. The pump pressure must be maintained throughout the operation to obtain a fine spray.

Quality control can be easily carried out as the product is whitish in colour and areas in which application is missed can be sprayed again. Emcoril® AC(W), If used correctly, certain subsequent coats can be applied without adhesive problems. Additional substrate preparation is not necessary. Standard coating systems and plasters can be applied without removing Emcoril® AC(W). Reactive resin systems, like epoxy of polyurethane resins cannot always be used on top of Emcoril® AC(W). Before applying such systems, specific trials must be carried out



# Technical Data for Emcoril® AC(W)

Characteristic	Unit	Value*	Comments
Consumption	Grams / m <sup>2</sup>	200 to 250	Approx. depends on spraying device and wind Velocity
Minimum Water retention	Kg/m2	0.40	In 72 hrs as per ASTM C 156 and AASHTO T 155
Reflectance	%	>80	As per ASTM E 97

#### Product Characteristics for Emcoril® AC(W)

Type of Product	Membrane Forming Curing Compound	
Form	Liquid	
Colour	White, Translucent	
Shelf Life	9 Months from date of Manufacture	
Delivery	230 kg drums and 30 kg pails	
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost	
Disposal	Empty packs completely and dispose off carefully to protect our Environment	

## Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written from. The accepted engineering rules must be observed at all times.

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