

# Emcoril Protect H

## Concrete curing for freshly demoulded concrete in general concrete constructions

### Product Properties

- Ready-to-use water-based polymer dispersion
- High level of evaporation protection, strong barrier effect
- Facilitates optimum hydration progress in the concrete layer close to the surface
- Minimises the occurrence of early shrinkage cracks
- Decreases the rate of carbonation
- Overcoatable with standard commercial single-component coatings
- Low emissions acc. to AgBB
- Dries rapidly
- Alkali-resistant
- Solvent-free
- Film-forming
- Does not weather
- Can be applied by spraying, rolling or brushing
- Certified to TL NBM-StB 09, Type BE

### Areas of Application

- Curing of freshly demoulded concrete according to German code TL NBM-StB 09, Type BE
- Concrete curing for general concrete constructions, e.g. concrete slabs, walls and columns
- Concrete curing for non-trafficable surfaces without grip requirements
- For immediate application on the freshly demoulded concrete

### Application Instructions

#### General

Emcoril Protect H forms a protective film on the surface of the freshly demoulded concrete, extensively inhibiting evaporation of the water during the decisive hardening time. Its strong barrier effect ensures optimum hydration progress in the concrete layer close to the surface. As a result, good strength development is achieved and the occurrence of early shrinkage cracks is minimised.

Surfaces treated with Emcoril Protect H can be coated with one- or two-component polymer dispersion coatings (e. g. MC-Color). Reactive resin systems such as epoxy or polyurethane resins are, however, mostly not suitable for overcoating Emcoril Protect H. Application-specific trials will need to be carried out before such systems can be applied.

Conversely, even common paint systems and plasters can be applied to the treated surface without removing Emcoril Protect H. In the case of plastering, however, a bonding agent based on polymer dispersion, e. g. Murafan 39, must be used in spray shot application.

#### Application Methods

Emcoril Protect H is immediately applied to the surface of the freshly demoulded concrete. For spray application, MC-Spezialspritze or standard commercial pressure sprayers (including tree sprayers) equipped with flat jet nozzles (e.g. MESTO 1421 flat-jet nozzle 80-01 E) are particularly suitable. For rolling or brushing, use short-pile rollers or short-bristle brushes.

To ensure even spray application, the distance between nozzle and concrete surface during spraying should be approx. 0.5 - 1 m.

#### Further Information

The minimum concrete curing time depends on the exposure class, surface temperature and strength development. The relevant information can be determined from EN 13670/DIN 1045-3. However, Emcoril Protect H does not provide thermal protection (e.g. from cooling, high temperatures or extreme temperature changes).



## Technical Properties of Emcoril Protect H

Characteristic	Unit	Value*	Comments
Density	kg/dm <sup>3</sup>	approx. 1.00	
Barrier coefficient	%	approx. 20	acc. to TL NBM-StB 09
Consumption	g/m <sup>2</sup>	150 - 200	
Viscosity	s	13	Kinematic acc. to DIN 53211 - 4 mm
pH value	-	8 - 9	
Flash point	°C	-	Not suitable
Drying time	h	4.5	Tack-free
Application conditions	°C	≥ + 5 - ≤ + 30	Air, substrate and material temperature

## Product Features of Emcoril Protect H

Self-monitoring	EN ISO 9001
Equipment cleaning agent	Water immediately after use
Colour	Milky white
Form	Liquid
Packaging	30 kg canisters 200 kg drums 1,000 kg containers
Storage	Keep free from frost! Shelf life 12 months if stored dry in original containers
Disposal	In the interest of the environment, please ensure the containers are empty and residue-free prior to appropriate disposal.

\* All technical values are laboratory results determined at +20 °C and 50 % relative humidity.

### Safety Advice

Please note the safety information and advice given on the packaging labels and safety data sheets.  
GISCODE: NBM 10; water hazard class: 1

**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 only binding if given in written form. The accepted engineering rules must be observed at all times.

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