



ombran CPS (VP)

Coating system for sewage manholes exposed to biogenic sulphuric acid corrosion

Product Properties

- Hand and spray application
- High mechanical strength when cured
- High chemical resistance
- Resistant to biogenic sulphuric acid corrosion
- Good adhesion on mineral substrates (e.g. concrete or masonry)

Application Areas

- Sewage manholes exposed to biogenic sulphuric acid corrosion
- Pump manholes in municipal wastewater disposal exposed to biogenic sulphuric acid corrosion
- Application is not suitable for weather exposed surfaces
- REACh-assessable exposure scenarios: periodical inhalation, application

Application Advice

Substrate Preparation

The substrate must be dry (according to DafStb-guideline "Protection and Repair of Concrete Parts" issue October 2001, part 2 item 2.3.5), clean and free from all loose particles, dust, oil, grease, cement slurries and any other contaminants. The adhesive tensile strength of the substrate must conform to relevant technical regulations.

After preparation the substrate must bear sufficient surface roughness. To achieve this the surface-near aggregates must be exposed. Sewer masonry needs to be prepared that the masonry bears sufficient surface roughness.

Re-Profiling / Levelling

Highly uneven or textured surfaces must be re-profiled or levelled prior to application of ombran CPS (VP). The surface structure must be rough (e. g. by abrading the mortar), where necessary to be prepared by slight sweeping.

Mixing

Ombran CPS (VP)-resin and ombran CPS (VP)-hardener are mixed together by slow-running double stirrers (max. 400 rev/min) for at least two minutes until a homogeneous mass is achieved. Afterwards the powder component of ombran FT is added and mixed again with fast-running double stirrers for at least two minutes. Mixing by hand and the mixing of partial quantities is not allowed.

Mixing Ratio

Please see "Technical Data" table. Mix 6.8 kg ombran CPS (VP)-resin, 4.2 kg ombran CPS (VP)-hardener and 11 kg ombran CPS (VP)-powder to get 22 kg of ready-to-use material.

Application

Ombran CPS (VP) is applied onto the prepared substrate by float or plastic or steel trowel in one work step at a minimum thickness of 4 mm over grain tips. We recommend applying a thin film with high pressure that is overworked "fresh-in-fresh". Trowel marks must be removed and smoothed immediately.

Curing

During application and 24 hours afterwards ombran CPS (VP) must be protected from rain, direct sun and perspiration water. During this time the material, air and substrate temperature must be between +10 °C and +25 °C. The relative humidity must not exceed 80 %.

Safety Advice

Observe the hazard notices and safety advice on the labels and safety data sheets. For further safety guidance see our information sheet "Safety measures when using coating mortar and reaction-cured plastics".



Technical Data of ombran CPS (VP)

Characteristic	Unit	Value*	Comments
Mixing ratio	p.b.w.	30.9	ombran CPS-resin
		19.1	ombran CPS-hardener
		50	ombran CPS-powder
Application time	minutes	approx. 30	
Application conditions	°C	+10 to +25	air, material and substrate temperature
	K	3	above dew point
	%	approx. 80	relative humidity
Coverage**	kg/m ² /mm	approx 1.5	ready-mix mortar
Layer thickness	mm	approx. 4	max. total layer thickness (dry-mortar)

Product Characteristics of ombran CPS

Colour	blue
Delivery	6.8 kg canister (resin), 4.2 kg canister (hardener), 11 kg drum (powder)
Cleaning agent	MC-Reinigungsmittel U
Storage	If tightly sealed, the original packs can be stored for at least one year at temperatures between +5 °C and +25 °C in dry conditions. The same requirements apply to transport. ombran CPS-resin can be stored for 6 months.
Disposal	Packs must be emptied completely.

* Unless otherwise stated, all technical data were determined at +23 °C und 50% relative air humidity.

**Quantities used depend on the object and on the roughness of the substrate as well as on the storage and working temperatures and the temperature of the substrate. We recommend carrying out experiments beforehand to determine object-specific quantities.

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.

Edition 12/09. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.