

ombran® CPS

Hybrid-silicate coating system for sewage manholes exposed to biogenic sulphuric acid corrosion

Product Properties

- · Hand and spray applicable coating system
- · High mechanical and chemical resistent when cured
- · Highly water vapour permeable
- Resistant to biogenic sulphuric acid corrosion
- Good adhesion on mineral substrates (e.g. concrete)
- · General building supervision approval

Application Areas

- Sewage manholes exposed to biogenic sulphuric acid corrosion
- Pumping sumps and reservoirs in domestic wastewater systems exposed to biogenic sulphuric acid corrosion
- Application not suitable for weather exposed surfaces
- · REACH-assessed exposure scenarios: periodical inhalation, application, long-term water-contact

Application Advice

Substrate Preparation

See the data sheet "General Application Advice for hybrid-silicate coating systems".

Mixing

Shake originally sealed ombran® CPS-Harz (resin) intensively in advance. Ombran® CPS-Harz (resin) and ombran® CPS-Härter (hardener) are mixed by fast-running single stirrer (min. 500 rpm) for at least 2 minutes until a homogeneous mass is achieved. Then the powder component of ombran® CPS is added while mixing slowly and afterwards mixed again with fast-running stirrer for at least additional 2 minutes. According to equipment planner only helical ribbon or basket agitators are permitted. Mixing by hand and mixing of partial quantities is not allowed. Ombran® CPS must not be mixed with water.

Mixing Ratio

See the table "Technical Data". The preparation of 22 kg of finished product requires 6.8 kg ombran CPS-Harz (resin), 4.2 kg ombran® CPS-Härter (hardener) and 11 kg ombran® CPS-Pulver (powder).

Application (Hand application)

Apply ombran[®] CPS to the prepared substrate using a trowel, plastic or steel smoothing tool. Depending on material and ambient temperature a material maturing time of 5 minutes must possibly

be observed before the application.

First apply a thin "scratch coat" with high pressure. Overcoat it "fresh-on-fresh" and as well with high compacting pressure by 4 mm layer thickness above grain tips in one workstep subsequently. Any trowel marks from hand working must be smoothed out immediately

Application (Spray application)

For using spraying method please request a separate technical advice and observe the equipment planner. It is recommended to apply a precedent thin "scratch coat" as well.

Curing

During application and for 24 h afterwards, ombran® CPS must be protected from rain and intense sunlight. A high relative air humidity > 80% optimizes the hardening process. Condensate formation can be tolerated after application. During the time mentioned above air and substrate temperature must be between + 10 °C and + 25 °C.

General information

Exposure to UV-light may cause color changes, which usually do not affect the properties and usability of the coating.

Safety Advice

Observe the hazard notices and safety advice on the labels and safety data sheets.



Technical Data of ombran® CPS

Characteristic	Unit	Value*	Comments
Mixing ratio	p.b.w.	30.9	ombran [®] CPS-Harz (resin)
		19.1	ombran [®] CPS-Härter (hardener)
		50.0	ombran [®] CPS-Pulver (powder)
Application time	min	approx. 30	
Application conditions	°C	+ 10 to + 25	air, substrate and material temperature
	K	3	dewpoint distance
	%	max. 80	relative air humidity (only during coating)
Coverage**	kg/m²/mm	approx 1.5	
Layer thickness	mm	≥ 4	above grain tips
Resistant to water after	h	approx. 24	

Product Characteristics of ombran® CPS

Colour	blue		
Form of delivery	6.8 kg tin bucket (resin) / 4.2 kg canister (hardener) / 11 kg tub (powder)		
Equipment cleaner	MC-Reinigungsmittel U (MC-Cleaner U)		
Storage	If tightly sealed, the original packs can be stored for at least 1 year at temperatures between + 5 °C and + 25 °C in dry conditions. The same requirements apply to transport.		
Pack disposal	Make sure the pack is completely empty.		

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

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 03/20. 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.

^{**}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.