# 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

#### **AREAS OF APPLICATION**

- 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:** 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-in-fresh" and as well with high compacting pressure by 4 mm layer thickness (one working step, maybe several layers) above grain tips 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.

#### **TECHNICAL VALUES & PRODUCT CHARACTERISTICS**

Characteristic	Unit	Value	Comments
Mixing ratio	mass frac- tions	30.9 : 19.1 : 50	base component : Hardener component : aggregate
Working time	minutes	approx. 30	
Application conditions	°C	≥ 10 ≤ 25	air, substrate and material temperatures
	K	3	above dew point
1)	%	≤ 80	rel. humidity
2)		> 80	rel. humidity
Consumption 3)	kg/m²/mm	approx. 1.5	
Resilient after (chemical full)	hours	24	
Resilient after (mechanically full)	hours	24	
Layer thickness	mm	≥ 4	above grain tips
Water resistant after	hours	approx. 24	
	All technical	values are laborator	ry results determined at 21°C ±2°C and 50% relative humidity.

- 1) during coating application
- 2) after the coating work / curing
- 3) Consumption rates depend on the roughness of the substrate as well as storage, application and substrate temperature. Preliminary tests are recommended to determine object-specific consumption quantities.

Equipment cleaning agent	MC-Reinigungsmittel U		
Colour	blue		
Delivery form	6.8 kg tin can (resin), 4.2 kg can (hardener), 11 kg bucket (powder)		
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 12 months.		
Packaging disposal	Make sure single-use containers are completely empty.		

## Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE: PU40

Note: The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300018297]