

ombran W

Rapid-curing, expanding plugging mortar to stop water infiltration

Product properties

- Cement-bound, one-component
- Expanding during curing process when exposed to water (swelling effect)
- Does not contain any substances that promote corrosion
- Volume stability in accordance with DIN 1164

Areas of application

- Rapid and permanent stopping of leaks and water intrusions in structures of concrete, masonry and natural stone
- Sealing pipe penetrations and pipe connections
- Retro-sealing of damaged pipe couplings and manhole ring joints
- Sealing of internal corners of components and transitions between components
- REACh-assessed exposure scenarios: periodical inhalation, application, long-term water-contact

Application

Preparation of the substrate

See the data sheet "General Application Advice for manhole and sewer repair mortars". Damaged areas must be cut back at 45° (at least 3 cm deep) to improve adhesion to the substrate.

Mixing

The rapid-curing sealing mortar is prepared using ombran W ready-mix mortar and water. Small amounts to suit the defective site must be mixed by hand for 15 to 20 seconds until a firm plastic uniform mortar is obtained.

Mixing ratio

See table "Technical properties". About 0.2 litres of water are needed for 1 kg of ombran W (dry mortar). Since ombran W is cement-bound, the amount of water needed may vary.

Processing

At water intrusions, press the stiffish mortar into

the deepest part of the leak / vacancy by hand (protective gloves must be worn) and apply pressure for about one to two minutes. Immediately after this, any excess material can usually be removed with a trowel or similar. When doing this, always work outwards from the middle, otherwise there is a risk of the not yet fully cured mortar becoming detached from the substrate.

Other instructions

Ombran W is a rigid mineral based product, therefore subsequently appearing cracks, settling and deformation due to construction work may result in further leaks. To achieve a durable sealing we recommend application of a coating made of ombran MHP.

Safety Advice

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

GISCODE: ZP1

Technical Data for ombran W

Characteristic	Unit	Value*	Comments
Mix ratio	p.b.w.	1 : 0.2	ombran W : water
Processing time	min	1	
Application conditions	°C	+ 5 - + 30	air, substrate and material temperature
Coverage**	kg/m ² /mm	depends on kind of application	dry mortar
Fresh mortar raw density	kg/l	2.0	
Development of compressive strength	MPa	approx. 8.0	after 1 h
		approx. 10.0	after 3 h
		approx. 13.0	after 6 h
		approx. 23.0	after 1 d
		approx. 35.0	after 7 d
		approx. 35.0	after 28 d
Development of bending tensile strength	MPa	approx. 2.5	after 1 h
		approx. 3.5	after 3 h
		approx. 4.0	after 6 h
		approx. 4.0	after 1 d
		approx. 5.5	after 7 d
		approx. 5.5	after 28 d

Product Characteristics for ombran W

Colour	grey
Form of delivery	15 kg bucket
Equipment cleaner	water
Storage	If tightly sealed, the original packs can be stored for at least 6 months 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.

** 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 07/15. 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.