

ombran FG

Fast-setting grout for leveling of manhole frames

Product Properties

- Cement-bound, one-component
- Very high flowability
- High initial and final strength
- Low shrinkage
- Resistant to sulphate attack
- Tested resistance to freeze de-icing salt in accordance with CDF test method
- Very good adhesion to mineral substrates

Areas of Application

- Grout for manhole frame leveling
- Void-free grouting of joints between manhole frame and taper
- REACh-assessed exposure scenarios: application, periodical water-contact

Application

Substrate preparation

See data sheet "General Application Advice for hydraulic-setting manhole frame grouting mortar".

Pre-wetting

See data sheet "General Application Advice for hydraulic-setting manhole frame grouting mortar".

Mixing

The grout is prepared up using the ready mixed ombran FG and water. Pour out the water, scatter the ready-mixed mortar into the water and mix to a uniform, lump-free workable mortar consistency. Fast running (> 400 rpm) basket agitators are suitable for mixing ombran FG. Mixing takes 2 to max. 3 minutes. Mixing by hand and mixing of partial quantities is not allowed.

Mixing Ratio

See the table "Technical data". Use 4.9 up to 5.1 liters of water for each 25 kg bag of ombran FG. The consistency might be adjusted by varying the water amount within the mentioned range.

Application / Installation

See data sheet "General Application Advice for hydraulic-setting manhole frame grouting mortar". Ombran FG is to be applied / installed immediately after mixing. To prevent air voids, pour the mortar continuously from one side only. The grout might be encouraged to flow by poking with a wire loop. Mix only as much ombran FG as could be applied within the stated processing time. Avoid heavy vibrations and shaking around the job site during application and curing period (temperature-dependent) of ombran FG.

Curing / Subsequent Works

See data "General Application Advice for hydraulic-setting manhole frame grouting mortar".

Safety Advice

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

GISCODE: ZP1

Technical data of ombran FG

Characteristic	Unit	Value*	Comments
Mixing ratio	p.b.w.	100 : 19.6 - 20.4 25 : 4.9 - 5.1	ombran FG : water
Application time	min	7 - 9	after mixing, temperature-dependent
Form removal after	min	approx. 15	temperature-dependent
Application conditions	°C	+ 5 to + 30	Air, substrate and material temperature
Coverage**	kg/l	approx. 1.73	dry mortar
Layer thickness / gap width	cm	1 - 6	per work step
Grain size	mm	approx. 0.5	
Fresh mortar raw density	kg/l	approx. 2.1	
Compressive strength	MPa	> 10 approx. 25 approx. 45 approx. 55	after 1 h after 1 d after 7 d after 28 d
Bending tensile strength	MPa	approx. 3.0 approx. 5.0 approx. 9.0 approx. 11.0	after 1 h after 1 d after 7 d after 28 d

Product Characteristics of ombran FG

Cleaning Agent	water
Colour	grey
Form of Delivery	25 kg sack
Storage	If sealed, the original packs can be stored for at least 6 months at temperatures between + 5 °C and + 25 °C in dry conditions. Same requirements apply to the transport.
Pack Disposal	Make sure the pack is completely empty

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

** Quantities used depend on the object and on the roughness of substrate as well as on the storage, working and substrate temperatures. 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.