Konudur Flexfit

Reaction resin based filler for flexible embedding of CIPP-liners to manhole walls



PRODUCT PROPERTIES

- High-reactive filler, self-stable material properties, suitable for vertical and overhead application
- Permanently flexible and resistant to domestic waste water acc. to DIN 1986-3
- Highly chemical and mechanical resistant
- Good adhesion to dry and damp mineral based substrates
- Good adhesion to GRP substrates
- General building supervision approval Z-42.3-578

AREAS OF APPLICATION

- Embedding of CIPP-liner (Polyester glass / EP needle felt) to manhole walls
- Embedding of laterals in manholes and accessible sewage constructions
- Sealing of manhole ring joints (without back-bearing pressure)
- Sealing of leaking sleeves in accessible sewage constructions (without back-bearing pressure)
- REACh-assessed exposure scenarios: periodical inhalation, application, long-term water-contact

APPLICATION ADVICE

Substrate preparation: The substrate has to be clean and free of any loose particles, dust, oil, grease or any waste water residuals. Plastic based substrates are to be roughened, afterwards cleaned / washed and dried before the filler is applied. When embedding of CIPP-liner, any preliner and liner coatings are to be removed mechanically in all areas where the filler is to be applied. Mineral based substrates might be dry or damp. A closed water film is to be avoided. For more information, also concerning application details, have a look on the data sheet "General application advice for the connection of CIPP liners to manholes".

Mixing: Konudur Flexfit is delivered in packs containing proportionate amounts. Base (comp. A) and hardener component (comp. B) are to be mixed thoroughly and homogenously, using slowly running stirrers (200 - 400 rpm, e.g. cordless screwdriver with circular mixer) so that a homogenous colour (also at the side areas of the can) is given. In order to optimally mix the material at the bottom of the can, it is recommended to repot the material in a clean container of a suitable size in the meantime and then mix it further. To ensure a correct mixing ratio and in terms of environmental protection it is necessary to empty the single packages completely. Mixing by hand or mixing of partial quantities is not allowed.

Application (plugging / filling): Once Konudur Flexfit is mixed, the material can be applied manually, using suitable tools (trowel, leveller, spatula) to the prepared substrate. To optimize the adhesion to damp substrates slightly stiffed material can be overworked with slight pressure. Within its pot life Konudur Flexfit can be smoothed with e.g. vegetable oil.

Application details are given in the data sheet "General application advice for the connection of CIPP liners to manholes".

Resistance to water contact: The resistance to water contact / back to service time of Konudur Flexfit depends on material, substrate and air temperature. For details on this topic see table "Technical dvalues & prudct characteristics". Keep damaged spot / application area of Konudur Flexfit free of waste water during application and during curing phase. The first contact to water is possible as soon as the material surface has stiffened (can still be sticky).

Cleaning: Within pot life all equipment might be cleaned using MC-Reinungsmittel U (thinner). Partially or fully cured material can only be removed by mechanical means.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	parts by vol- ume	1:1	comp. A : comp. B
Density	kg/l	approx. 1.61	component A
		approx. 1.5	component B
		approx. 1.48	mixture
Working time	minutes	approx. 7 - 8	at 15° C
Application conditions	°C	≥ 5 ≤ 30	air and substrate temperatures
		≥ 15 ≤ 25	material temperature
Viscosity	Pa·s	approx. 200	component A
		approx. 220	component B
		approx. 540	mixture
Curing time	minutes	approx. 25 - 30	
Tensile strength	N/mm²	≥2	EN ISO 527
Shore D hardness		≥ 25	
Resilient after (mechanically)	days	approx. 7	
Resilient after (chemically)	days	approx. 7	
Water resistant after1)	minutes	approx. 30	
Ultimate elongation	%	≥ 17	EN ISO 527
Tensile strength	N/mm²		EN ISO 4624
		≥ 2	Concrete (moist)
		≥ 2	Sewage clinker / stoneware (wet)
		≥ 2	PVC (moist)
		approx. 1	PE-HD (moist)
		≥ 2	GRP / manmade fibre liner
	All technical	values are laborator	y results determined at 21°C ±2°C and 50% relative humidity.

1) under sewerage atmosphere

Equipment cleaning agent	MC-Reinigungsmittel U		
Colour	anthracite grey		
Delivery form	box of 4 x 1.0 litre		
Storage	Can be stored in original sealed packages at temperatures between 5°C and 20°C in dry conditions for at least 6 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: PU20

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. [2300018288]