ombran SC

Organic-mineral resin for the rehabilitation hand lay-up laminate



PRODUCT PROPERTIES	 Low viscosity, two-component organic-mineral resin 			
	 Styrene free and odourless 			
	 High chemical resistance 			
	 High mechanical resistance 			
	 Highly water vapour diffusible 			
	 Quickly reworkable for continuous work 			
	 Fast curing times even at low temperatures 			
	 Flexible adjustment of reaction time and viscosity 			
	 Good adhesion to mineral substrates like concrete, mortar, brick and ceramic 			
	 Good adhesion to non-mineral substrates like steel, hybrid-silicate coatings, organic-mineral shortlin- 			
	ers, GRP and EP-needle felt liner			
	 Can be used on dry and matt damp mineral substrates 			
AREAS OF APPLICATION	Impregnation and fulling of E-CR glass fibre mats for renovation with hand lay-up laminate			
	Lining system for accessible structures of the sewerage system			
	 Liner connection in sewer manholes 			
	 Lining of manhole channels or lower parts 			
	 Supplement to GRFP elements and panels 			
	 REACH-assessed exposure scenarios: periodical inhalation, application, long-term water contact 			
APPLICATION ADVICE	Substrate preparation: See data sheet "General application guide for renovation with hand lay-up lami- nate".			
	Mixing: The organic-mineral resin ombran SC consists of the two components ombran SC A and ombran SC B. These are to be mixed carefully and homogeneously with each other using a mechanical stirrer			
	(e.g. cordless screwdriver with anchor or propeller stirrer).			
	When using the accelerator ombran SC Cat L, the catalyst is added to component A in advance and a			
	premixing of approx. 30 seconds is carried out. The quantity of accelerator to be added should be deter-			
	mined with reference to component A (1 - 4 % of the quantity of acceleration to be added should be deter			
	addition of component B is at least another 90 seconds. Mixing by hand is not allowed.			
	Mixing ratio: See table "Technical values / product characteristics". Component A and component B are			
	supplied in quantitatively matched packs from which partial quantities are taken. For further information,			
	also on the addition of accelerator, please refer to the data sheet "General application guide for renova- tion with hand lay-up laminate".			
	Application: See data sheet "General application guide for renovation with hand lay-up laminate".			
	Cleaning of equipment: Within the pot life, residues of the resin can be removed with MC-Reinigungs-			
	mittel U. The cleaning agent used must be completely removed from venting rollers before each use to			
	avoid mixing with uncured, freshly applied reaction resin during venting. Reacted material can only be			
	removed mechanically.			
	Additional information: Early exposure to water can lead to white discolouration on the surface of the			
	laminate, UV contact causes the reacted resin to darken; in both cases, the usability is not impaired.			
	Please also observe the data sheet "General application guide for renovation with hand lay-up laminate".			

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	parts by vol- ume	1:2	comp. A : comp. B
Density	kg/l	approx. 1.44	component A
		approx. 1.13	component B
		approx. 1.23	mixture
Viscosity	mPa s	approx. 79 - 139	component A
		approx. 120 - 180	component B
Working time ¹⁾	minutes		with addition of ombran SC Cat L
At 1 Vol. %		approx. 18	at 20° C material and ambient temperature
At 2 Vol. %		approx. 12	at 20° C material and ambient temperature
At 3 Vol. %		approx. 15	at 10° C material and ambient temperature
At 4 Vol. %		approx. 8	at 10° C material and ambient temperature
Application conditions	°C	≥ 5 ≤ 30	air and substrate temperatures
		≥ 10 ≤ 25	material temperature
Fully cured after ¹⁾	minutes		with addition of ombran SC Cat L
At 1 Vol. %		approx. 60 - 70	at 20° C material and ambient temperature
At 2 Vol. %		approx. 40 - 45	at 20° C material and ambient temperature
At 3 Vol. %		approx. 60 - 70	at 10° C material and ambient temperature
At 4 Vol. %		approx. 45 - 50	at 10° C material and ambient temperature
Consumption ²⁾	l/m²	approx. 4	depending on substrate and application
Tensile strength	N/mm²		EN ISO 1542
		≥3	concrete dry, moist
		≥2	Sewage clinker / stoneware (wet)
		≥ 3	steel substrate
		≥2	GRP / manmade fibre liner
Resilient after (chemical full)	hours	24	
Resilient after (mechanically full)	hours	24	
Water resistant after			hardening
Shore D hardness		approx. 70	pure resin value

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

1) 750 ml batch, 3-layer application

2) 3-layer structure incl. top coat

Equipment cleaning agent	MC-Reinigungsmittel U	
Colour	Beige	
Delivery form	30 I container pair (Comp. A: 10 I / Comp. B: 20 I)	
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 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. [2300018310]