FreiLacke

FREOPOX-Hydro-Structure-Coat
WE1961M/HE0120

Characteristics	Water-thinnable 2C coating	
	Application, e.g. in the vehicle construction sector	
	Structure effect	
	Fast initial drying	
	Good stone chip resistance	
Technical / Physical Data	Binder-Base	Epoxy resin crosslinked with polyamine
	Colour	All common colour shades
	Gloss value visual	mat
	Viscosity	2400-3600 mPa.s/ Spindle 5 60 revolution/ min.
	Hardener	HE0120 See technical data sheet
	Mixing ratio	Parts by weight 7:1
	Mixing ratio	Parts by volume 5:1
	Thinner	demineralised water
	pH-Value	7-8
	Density calculated	1,40-1,46 g/ml
	Density calculated	1,30-1,40 g/ml after adding hardener
	Solid Mass calculated	62-65 %
	Solid Mass calculated	60-63 % after adding hardener
	Solid content in volume calculated	320-340 ml/kg
	Solid content in volume calculated	340-350 ml/kg after adding hardener
	Material usage theoretical, without application loss	170-180 g/m², Layer thickness 60 µm
	Reference colour of the specified values	Colour of WE1961MRU735
Substrate	Steel, passivated or pretreated substrates	
Pretreatment	The substrate must be free of adhesion-impairing substances such as oil, grease, rust, scale, rolling skin, wax and separating agent residue. Preliminary tests are recommended for assuring the suitability of coating qualities on the substrate. For more stringent requirements, we recommend: for corrosion protection - e.g. phosphating for adhesion - e.g. blasting, pickling, sanding	
Structure recommendation	Substrate	on blasted steel plate

DIN EN ISO 9001
IATF 16949
EMAS

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	Primer	WE1935LRU113 Mixing ratio 8:1/HE0041 Dry film thickness 60 µm
	Top coat	WE1961MRU735 Mixing ratio 7:1/ HE0120 Dry film thickness 60 µm
Mechanical Test	Cross-cut-test DIN EN ISO 2409	Gt 0
Resistance Test		
	Condensate constant climate DIN EN ISO 6270-2 (CH)	240 hours Degree of blistering 0 (S 0) DIN EN ISO 4628-2
	Salt spray test (NSS) DIN EN ISO 9227	480 hours Water ingress Wb < 1 mm DIN EN ISO 4628-8
	Chemical resistance	Needs to be checked. The temperature and concentration of chemicals have a major influence on the test outcome.
Processing and application	Prior to use, stir well or mix components homogeneously (e.g. with fast mixer). To prevent skin formation, over-coat with water. Dry film thickness must not exceed 250 µm - risk of reaction bubbles.	
	Object temperature	10-30 °C
	Processing conditions	Room temperature 18-22 °C Relative humidity 40-60 %
	Processing time	max. 3 hrs./ 20 °C The processing time can decrease at higher temperatures and/or under pressure.
	Airless spraying	40-60 Sec./ 6 mm Viscosity cup (DIN 53211) Nozzle: 0,33 mm Angle 30° Material pressure 150 bar
	Airmix spraying	40-60 Sec./ 6 mm Viscosity cup (DIN 53211) Nozzle 0,33 mm Angle 30° Material pressure 80 bar Atomiser pressure 3
	High pressure spraying	60-80 Sec./ 4 mm Viscosity cup (DIN 53211) Nozzle 1,7 mm Spray pressure 3 bar
	Rolling / painting	as delivered viscosity
	Electrostatic	possible, system-specific
	Over-coating capability	possible with same quality, dry at the earliest after matting
	Cleaning of equipment	Immediately with water - possibly with addition of 5-10 % by weight EFD cleaning agent 400916. Dried-on equipment with org. solvents, e.g. EFD thinner 400424.
	Health & Safety at Work guidelines The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous substances, safety	

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	data and recommendations concerning Health & Safety at Work and environmental protection can be found in the corresponding safety data sheet.	
Curing	Air drying	at 20°C, 50% relative humidity with air movement
	Dust drying	after 15 min. (degree of drying 1/ DIN EN ISO 9117-5)
	Dry to the touch	after 2 hrs. (degree of drying 4/ DIN EN ISO 9117-5)
	Full drying	after 8 days (pendulum damping/DIN EN ISO 1522)
	Oven drying	possible to 70°C
Resistance to storage	Approx. 12 month in original packagings at an ambient temperature of 5 to 25 °C. Protect from frost. Open packages are to be used within a short time. The minimum storage stability of each batch is stated on the product label. The material does not necessarily become unusable if stored for longer than this period. However, for quality assurance purposes, an inspection of these materials is essential to ensure that they are still suitable for the intended application.	
Specific comments	**EFD-info** Refer to the EFD information for further technical information. Nr. 111 + 150	
	Test conditions All information is based on a standard climate 23/50 DIN EN 23270. All information is based on our product knowledge and experience. We have no direct influence on the application itself. Please do not hesitate to contact us for further information. The information provided here contains reference values and does not constitute a specification.	

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