FreiLacke

FREIOTHERM-Hydro-Coating
WO1820M

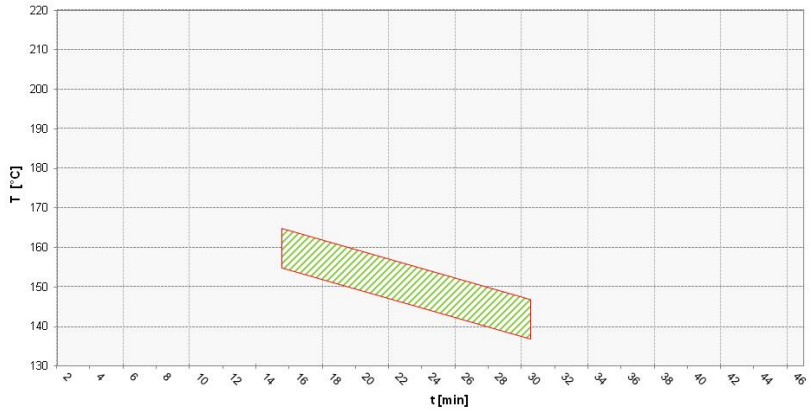
Characteristics	Water-thinnable single-layer coating	
	Application, e.g. in the mechanical engineering and plant construction sector	
	Good condensation resistance	
	Can be coated over with powder coatings	
	Good scratch resistance	
Technical / Physical Data	Binder-Base	Combination of polyester/amino resin
	Colour	All common colour shades
	Gloss value visual	mat
	Viscosity DIN 53211 (formerly)	Flow time 50-60 seconds 4 mm viscosity cup
	Thinner	demineralised water
	pH-Value	8,7-8,9
	Density calculated	1,15-1,35 g/ml
	Solid Mass calculated	44-50 %
	Solid content in volume calculated	210-230 ml/kg
	Material usage theoretical, without application loss	345-380 g/m², Layer thickness 80 µm
	Reference colour of the specified values	Colour of WO1820MH1938
Substrate	Steel	
	Steel - preliminary test required for galvanised substrates	
	Aluminium	
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 iron-phosphated steel plate
	Top coat	WO1820MH1938 Dry film thickness 30 µm
Mechanical Test	Cross-cut-test DIN EN ISO 2409	Gt 0
Resistance Test	Condensate constant climate DIN EN ISO 6270-2 (CH)	504 hours Degree of blistering 0 (S 0)

DIN EN ISO 9001
IATF 16949
EMAS

Emil Frei GmbH & Co. KG
Döggingen
Am Bahnhof 6
78199 Bräunlingen | GERMANY
Phone +49 [0] 7707.151-0
Fax +49 [0] 7707.151-238
www.freilacke.de
info@freilacke.de

FREIOTHERM-Hydro-Coating
WO1820M

		DIN EN ISO 4628-2
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 40 µm - risk of reaction bubbles.	
	Object temperature	10-30 °C
	Processing conditions	Room temperature 18-22 °C Relative humidity 40-60 %
	ESTA high rotation	as delivered viscosity
	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 data and recommendations concerning Health & Safety at Work and environmental protection can be found in the corresponding safety data sheet.	
Curing		
	Oven drying	30 min./ 140 °C - 15 min./ 160 °C
	Object temperature green cross-hatching = baking conditions with good final properties	



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.	

DIN EN ISO 9001
IATF 16949
EMAS

Emil Frei GmbH & Co. KG
Döggingen
Am Bahnhof 6
78199 Bräunlingen | GERMANY
Phone +49 [0] 7707.151-0
Fax +49 [0] 7707.151-238
www.freilacke.de
info@freilacke.de

FREIOTHERM-Hydro-Coating
WO1820M

Nr. 111

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.

DIN EN ISO 9001
IATF 16949
EMAS

Emil Frei GmbH & Co. KG
Döggingen
Am Bahnhof 6
78199 Bräunlingen | GERMANY
Phone +49 [0] 7707.151-0
Fax +49 [0] 7707.151-238
www.freilacke.de
info@freilacke.de