Technical Data Sheet



WO1800H FREIOTHERM-Hydro-Coating

Product description

Product technology	water-thinnable baking coating
Application area	e.g. in the construction and sanitary sector
Application	for exterior use
Mechanical resistance	good hardness and elasticity
Substrate	Non-ferrous metals, Steel

General product properties

Binder-Base	Combination of acrylate/polyester/amino resin		
Colour	All common colour shades		
Gloss value	satin mat	30-60 GU, angle 60°	DIN EN ISO 2813
Viscosity	Flow time 16-20 sec. 4 mm flow cup		DIN 53211
pH-Value	8,3-8,7		DIN 19260
Solid mass	37-44 %		theoretical
Solid content in volume	27-31 %		theoretical
Reference product	The values given refer to the product with the shade WO1800HRA905.		
Resistance to storage	approx. 9 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.		
	does not necessarily become	ty of each batch is stated on th e unusable if stored for longer t an inspection of these materia intended application.	han this period. However, for

Application and processing

Pretreatment	The substrate must be free of adhesion-impairing substances such as oil, grease, rust, scale, mill scale, wax and release agent residues. We recommend the use of suitable mechanical pre-treatment processes (e.g. blasting, grinding) or chemical pre-treatment processes (e.g. phosphating) according to the requirements.	
Structure recommendation	Substrate	On bare steel plate
	Top coat	WO1800HRA905 Dry film thickness 30 μm

Our technical data sheets are to provide you with advice based on our latest state of knowledge. This guidance does not release you from your own obligation to test our products for their suitability for your intended purposes and applications.

The sale of our products is in accordance with our terms of business, delivery and payment.

DIN EN ISO 9001 | IATF 16949 | EMAS

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Note before use	Prior to use, stir well or mix components homogeneously (e.g. with fast mixer). To prevent skin formation, over-coat with water.		
Thinning	demineralised water		
Dry film thickness	must not exceed 40 µm – risk of reaction bubbles.		
Object temperature	10-30 °C, minimum +3 °C above dew point temperature		
Processing conditions	Room temperature 18-25 °C Relative humidity 40-60 %		
Immersing	16-25 sec. / 4 mm flow cup (DIN 53211)		
Material usage	without application loss 150-170 g/m² theoretical layer thickness 40 μm		
Curing	Recommended object temperature 20 min/160 °C		
	180		
	175		
	170		
	F 165		
	160		
	155		
	150		
	0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 t [min]		
	Objekt Temperatur in °C Object Temperature in °C 160 170		
	Haltezeit Minimum in Minuten 20 15 Holding time minimum in minutes		
	Haltezeit Maximum in Minuten Holding time maximum in minutes 60 30		
Note on curing	Coloured area = stoving conditions with good end properties		
	The displayed baking conditions are based on results from laboratory tests and therefore merely serve as a guideline when configuring the processing company's coating systems. The processing company is responsible for ensuring that the coating is fully cured. The complete curing of the coating must be checked by means of additional analytical and resistance tests using representative original parts under production conditions. Please do not hesitate to contact us if you require consultation.		
Oven drying	20 min. / 160 °C - 10 min. / 180 °C (object temperature)		

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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.
Comments	
Work-and Healthprotection	The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous goods, safety data and recommendations concerning Health and Safety at Work and environmental protection can be found in the corresponding safety data sheet.
Test conditions	All information is based on a standard climate 23/50 DIN EN 23270. All information is based on our product knowledge an 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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