FreiLacke

FREIOTHERM-Hydro-Coating
WO1834G

Characteristics	Water-thinnable baking coating	
	Application, e.g. in the mechanical engineering and plant construction sector	
	Good scratch resistance	
	Good hot water resistance	
	Good adhesion to steel and non-ferrous metals	
Technical / Physical Data	Binder-Base	Combination of polyester/amino resin
	Colour	All common colour shades
	Gloss value DIN EN ISO 2813	high glossy 80-95 Angle 60°
	Viscosity DIN 53211 (formerly)	Flow time 50-60 seconds 4 mm viscosity cup
	Thinner	demineralised water
	pH-Value	8,3-8,7
	Density calculated	1,10-1,30 g/ml
	Solid Mass calculated	40-50 %
	Solid content in volume calculated	330-370 ml/kg
	Material usage theoretical, without application loss	210-230 g/m², Layer thickness 80 µm
	Reference colour of the specified values	Colour of WO1834GI1221
Substrate	Aluminium	
	Aluminium, pretreated	
	Steel	
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	Aluminium
	Base coat	WO1834GI1221 Dry film thickness 30 µm
Mechanical Test	Cross-cut-test DIN EN ISO 2409	Gt 0
	Chemical resistance	Needs to be checked. The temperature and concentration of chemicals have a major influence on the test outcome.

DIN EN ISO 9001
IATF 16949
EMAS

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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.

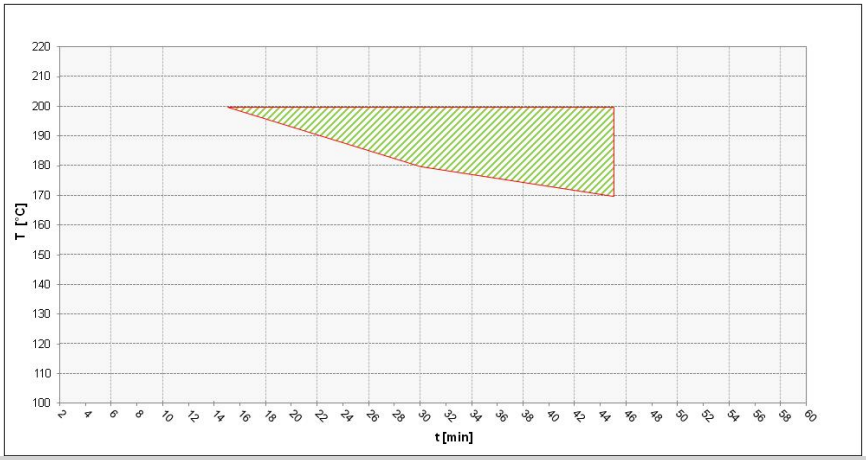
Object temperature	10-30 °C
Processing conditions	Room temperature 18-25 °C Relative humidity 40-60 %
High pressure spraying	as delivered viscosity Nozzle: 1,4 mm Spray pressure 3-4 bar
Electrostatic	possible, system-specific
Cleaning of equipment	Immediately with water - possibly with addition of 5-10 % 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./ 180 °C - 15 min./ 200 °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

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EFD-info
Refer to the EFD information for further technical information.
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.

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