Technical Data Sheet





PB1002A FREOPOX-Powder Coating

Product description

Product technology	Powder coating for interior use		
Application area	e.g. in the functional furniture and storage technology sector		
Surface	smooth		
Gloss value	satin mat		
Running properties	good		
Gas furnace stability	very good		
Surface hardness	good		
Mechanical resistance	good		
Approvals	USCG 164.112/EC0736/1182 46-02		

General product properties

Binder-Base	epoxy polyester resin		
Colour	All common colour shades		
Gloss value	satin mat	35-45 GU, Angle 60°	DIN EN ISO 2813
Density	1,2-1,7 g/cm ³ depending on the shade		theoretical
Resistance to storage	approx. 36 month in original packagings at an ambient temperature of 5 to 25 °C. Powder coatings must be stored in a cool and dry place.		
	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.		

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.		
Recommended coating thickness	60-80 μm		
Material usage	approx. 0,1 kg/m², layer thickness 70 µm	theoretical	
Processing	Corona, Tribo		

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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Curing	Recommended object temperature 10 min/180 °C. Baking window tested in colour shade 9010.			
	210			
	200			
	5			
	5 ▶ 190			
	180			
	170 0 5 10 15 20 25 30 35 40 45 50			
	t [min]			
	Objekt Temperatur in %C			
	Objekt Temperatur in °C180200Object Temperature in °C180200			
	Haltezeit Minimum in Minuten Holding time minimum in minutes 10 6			
	Haltezeit Maximum in Minuten 45 15 Holding time maximum in minutes			
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 system			
	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 of			
	not hesitate to contact us if you require consultation.			
Compatibility	Compatibility with other powder coatings must be checked.			
Further processing of	of coated pieces			
Touch-up coating	on request. For details see EFD Info No. 4			
Mechanical tests				
Sample description	On steel plate			
	60-80 μm layer thickness 10 minutes 180°C object temperature			
	product PB1002ARA910			
Cupping test	>3 mm DIN EN ISO 1520			

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Buchholz penetration test	< 1,2 mm		DIN EN ISO 2815			
Cross-cut-test	Gt 0		DIN EN ISO 2409			
Climatic tests						
Sample description	On iron-phosphated steel plate product PB1002ARA910					
Condensate constant climate	Load duration Detachment Cut	500 h <1 mm	DIN EN ISO 6270-2 (CH) DIN EN ISO 4628-8			
SO2 industry atmosphere	Load duration	10 cycles with 0.2 I	DIN EN ISO 3231			
Neutral salt spray test	Load duration Detachment Cut	240 h <1 mm	DIN EN ISO 9227 (NSS) DIN EN ISO 4628-8			
Chemical resistance						
Influencing factors	The chemical resistance depends on the concentration, temperature, exposure time and test method. This has to be checked depending on the application.					
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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