Technical Data Sheet





PL1004N FREOPOX-ESD-Powder Coating

Product description

Product technology	Powder coating for interior use
Application area	e.g. in the construction and sanitary sector
Surface	smooth
Gloss value	glossy
Property	electrostatic dissipative (ESD)
Running properties	good
Surface hardness	good
Mechanical resistance	good

General product properties

Binder-Base	epoxy polyester resin		
Colour	Pure bright colour shades ans white-dependent tones cannot be created.		
Gloss value	glossy	70-85 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. 0,10 kg/m², layer thickness 70 µm	theoretical
Processing	Corona	

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.

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Curing	Recommended object temperature 10 min/160 °C. Baking window tested in colour shade R2629.
	210
	200
	190 5 180
	170
	150 0 5 10 15 20 25 30 35 40 45 50 55 60 65 t [min]
	Objekt Temperatur in °C 160 180 200 Object Temperature in °C
	Haltezeit Minimum in Minuten 10 8 5 Holding time minimum in minutes
	Haltezeit Maximum in Minuten Holding time maximum in minutes 60 30 15
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.
Compatibility	Compatibility with other powder coatings must be checked.
Further processing o	of coated pieces

Touch-up coating on request. For details see EFD Info No. 4..

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Mechanical tests

Sample description	On steel plate 60-80 µm layer thickness 10 minutes 160°C object ten product PL1004NR2629	nperature	
Cross-cut-test	Gt 0		DIN EN ISO 2409
Cupping test	>3 mm		DIN EN ISO 1520
Impact-test	>60 kg cm (front)		DIN EN ISO 6272-1
Climatic tests			
Climatic tests			
Climatic tests Sample description	On iron-phosphated steel pla product PL1004NR2629	ate	
		500 h <1 mm	DIN EN ISO 6270-2 (CH) 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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