Technical Data Sheet





PS6033A FREIOTHERM-Powder Coating

Product description

Product technology	Super durable powder coating for decorative use on exteriors
Application area	e.g. in the vehicle construction sector
Surface	coarse structure
Surface hardness	good
Mechanical resistance	good

General product properties

Binder-Base	polyester resin	
Colour	All common colour shades	
Gloss visually	Satin gloss	
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	Uniform surface structure across a range of 80 to 120 μm	
Material usage	approx. 0,12 kg/m², layer thickness 80 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.

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Curing	Recommended object temperature 10 min/160 °C. Baking window tested in colour shade B3157.
	190
	180
	<u>ت</u> ب 170
	160
	150 15 10 15 20 25 30 35 40 45 50 t [min]
	Objekt Temperatur in °C Object Temperature in °C 160 180
	Haltezeit Minimum in Minuten Holding time minimum in minutes 10 5
	Haltezeit Maximum in Minuten Holding time maximum in minutes 45 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.
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 70-90 µm layer thickness 10 minutes 160°C object tem product PS6033AB3157	perature	
Cross-cut-test	Gt 0		DIN EN ISO 2409
Cupping test	>5 mm		DIN EN ISO 1520
Impact-test	80 kg cm (front)		DIN EN ISO 6272-1
Climatic tests	-		
Sample description	On zinc-phosphated steel pla product PS6033AB3157	te	

Condensate constant climate	Load duration	500 h	DIN EN ISO 6270-2 (CH)
	Detachment Cut	<1 mm	DIN EN ISO 4628-8
Neutral salt spray test	Load duration	500 h	DIN EN ISO 9227 (NSS)
	Detachment Cut	<1 mm	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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