# Technical Data Sheet





# **PS4105B** FREIOTHERM-Powder Coating

### **Product description**

Product technology	Powder coating for decorative use on exteriors
Application area	e.g. in the vehicle construction sector
Surface	smooth
Gloss value	high glossy
Running properties	good
Degassing	very good
Surface hardness	good
Mechanical resistance	good

### **General product properties**

Binder-Base	polyester resin					
Colour	All common colour shades					
Gloss value	glossy	70-80 GU, Angle 60°	DIN EN ISO 2813			
Density	1,2-1,7 g/cm <sup>3</sup> depending on	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 mater does not necessarily become unusable if stored for longer than this period. However, 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	70-80 μm					
Material usage	approx. 0,12 kg/m², layer thickness 80 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.

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

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Curing	Recommended object tempera Baking window tested in colour									
	210					1				]
	200									
	190									
	ਨੂ <sup>180</sup> ⊢ 170									
	160									
	150									
	140									
	130									
	0 5 10 15	20 25		35 [ <b>min]</b>	40	45	50	55	60	65
	Objekt Temperatur in °C Object Temperature in °C	140	150	160	180	200				
	Haltezeit Minimum in Minuten Holding time minimum in minutes	20	15	10	8	5				
	Haltezeit Maximum in Minuten Holding time maximum in minutes	s <b>60</b>	50	45	30	15				
Note on curing	Coloured area = stoving condit	ions with	good e	end pro	opertie	s				
	The displayed baking condition merely serve as a guideline wh The processing company is res complete curing of the coating resistance tests using represer	en config sponsible must be ntative ori	guring t for ens checke ginal p	the pro suring ed by m earts ur	that th	ig comp e coati of addi	bany's ng is f tional a	coatir ully cu analyti	ng syst red. Tl cal an	tems. he d
Compatibility	not hesitate to contact us if you Compatibility with other powde	•			ackod					
Compationity	Companying with other powde	coaling	5 must		sureu.					
Further processing o										

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

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# **PS4105B** FREIOTHERM-Powder Coating

#### **Mechanical tests** Sample description On steel plate 70-80 µm layer thickness 10 minutes 160°C object temperature product PS4105BW2952 **Cross-cut-test** Gt 0 DIN EN ISO 2409 **Cupping test** >6 mm DIN EN ISO 1520 **DIN EN ISO 6272-1** Impact-test 80 kg cm (front) **Climatic tests** Sample description On zinc-phosphated steel plate 70-80 µm layer thickness 10 minutes 160°C object temperature product PS4105BW2952 Neutral salt spray test Load duration 504 h DIN EN ISO 9227 (NSS) Detachment Cut <1 mm **DIN EN ISO 4628-8** Comments Work-and The standard personal safety precautions must be observed when handling painting Healthprotection 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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