## Technical Data Sheet





## **PP3003A** 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
Mechanical resistance	good
Scratch resistance	good
Resistance to light and weather	good
Corrosion protection	very good

#### **General product properties**

Binder-Base	polyester resin			
Colour	All common colour shades			
Gloss value	satin glossy	55-70 GU, Angle 60°	DIN EN ISO 2813	
Density	1,2-1,7 g/cm <sup>3</sup> 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, fo 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 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.

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	Baking window tested in colour sl	nade R	AL90	0 C. 05.							
	210										
	200										
	190										
	រ រ រ										
	<b>F</b> 180										
	170										
	160										
	150									-	
	0 5 10 15 20	25	30 t	35 [min]	40	45	50	55	60	65	70
	Objekt Temperatur in °C Object Temperature in °C	160	180	200							
	Haltezeit Minimum in Minuten Holding time minimum in minutes	15	10	5							
	Haltezeit Maximum in Minuten Holding time maximum in minutes	60	45	25							
Note on curing	Coloured area = stoving conditior	ns with	good	end p	rope	rties					
r	The displayed baking conditions a merely serve as a guideline wher The processing company is respo	are bas 1 config onsible	sed or juring for er	n resu the pi nsurin	lts fro roces q tha	om lab sing o t the c	ooratoi compa coatino	ry test any's d g is fu	s and coating	there g syst ed. Tł	fore ems. ne
C	complete curing of the coating mu	ust be o	check	ed by	mea	ns of a	additio	onal a	nalytic	al and	d oo do
r	not hesitate to contact us if you re	equire	consu	Itation	l.	prou	luction	Cond	1110115	i ica	se uo
Compatibility	Compatibility with other powder c	oatings	s mus	t be cl	hecke	ed.					
Further processing of coated pieces											
Touch-up coating	on request. For details see EFD I	nfo No	. 4								
Mechanical tests											
Sample description	On steel plate 60-80 μm layer thickness 10 minutes 180°C object tempera product PP3003AM2252	iture									
Cross-cut-test	Gt 0					I	DIN E	N ISO	2409		
Cupping test	>3 mm					I	DIN E	N ISO	1520		

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# **PP3003A** FREIOTHERM-Powder Coating

Sample description	On zinc-phosphated steel pla product PP3003AM2252	te	
Impact-test	>70 kg cm (front)		DIN EN ISO 6272-1
Climatic tests			
Sample description	On zinc-phosphated steel pla product PP3003AM2252	te	
Condensate constant climate	Load duration Detachment Cut	1000 h <1 mm	DIN EN ISO 6270-2 (CH) DIN EN ISO 4628-8
Neutral salt spray test	Load duration Detachment Cut	1000 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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