Technical Data Sheet





PP5353A

FREIOTHERM-Powder Coating

Product description

Product technology Powder coating for decorative use on exteriors

Application area e.g. in the functional furniture and storage technology sector

Surface smooth

Application for highest standards of resistance to abrasive wear

Scratch resistance very good

Resistance to light and very good

weather

Corrosion protection very good

General product properties

Binder-Base polyester resin

Colour All common colour shades

Gloss value satin glossy 50-65 GU, Angle 60° DIN EN ISO 2813

Density 1,2-1,7 g/cm³ depending on the shade theoretical

Resistance to storage approx. 24 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

70-90 µm

Material usage approx. 0,11 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.

DIN EN ISO 9001 | IATF 16949 | EMAS

FreiLacke | Emil Frei GmbH & Co. KG

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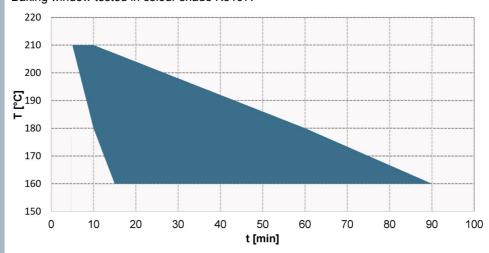




PP5353AFREIOTHERM-Powder Coating

Curing

Recommended object temperature 10 min/180 °C. Baking window tested in colour shade K3197.



Objekt Temperatur in °C Object Temperature in °C	160	180	210
Haltezeit Minimum in Minuten Holding time minimum in minutes	15	10	5
Haltezeit Maximum in Minuten Holding time maximum in minutes	90	60	10

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 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 180°C object temperature product PP5353AK3197	
Cross-cut-test	Gt 0	DIN EN ISO 2409
Cupping test	>3 mm	DIN EN ISO 1520
Impact-test	100 kg cm (front)	DIN EN ISO 6272-1

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Climatic tests

Sample description On zinc-phosphated steel plate

product PP5353AK3197

Condensate constant

climate

Detachment Cut

Load duration

1000 h <1 mm DIN EN ISO 6270-2 (CH) **DIN EN ISO 4628-8**

Neutral salt spray test Load duration 1000 h **Detachment Cut** <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.

Product label

General application

Powder coating for outdoor use

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