Technical Data Sheet





PS5205B

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 smooth Gloss value high glossy

Surface hardness good **Mechanical resistance** good

General product properties

Gloss value 75-100 GU, Angle 20° **DIN EN ISO 2813** high glossy

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

approx. 24 month in original packagings at an ambient temperature of 5 to 25 °C. Powder Resistance to storage

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

80-100 µm

Material usage

approx. 0,15 kg/m2, layer thickness 100 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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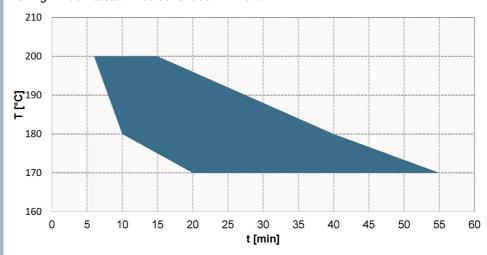




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Curing

Recommended object temperature 10 min/180 °C. Baking window tested in colour shade RAL7040.



Objekt Temperatur in °C Object Temperature in °C	170	180	200
Haltezeit Minimum in Minuten Holding time minimum in minutes	20	10	6
Haltezeit Maximum in Minuten Holding time maximum in minutes	55	40	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 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 80-100 µm layer thickness 10 minutes 180°C object temperature	
Cross-cut-test	Gt 0	DIN EN ISO 2409
Cupping test	4 mm	DIN EN ISO 1520
Impact-test	80 kg cm (front)	DIN EN ISO 6272-1

Climatic tests

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DIN EN ISO 9001 | IATF 16949 | EMAS

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Sample description On blasted steel plate

Primer: Suitable cathodic EC or powder coating primer.

Top coat:

product PS5205BRA740.

Neutral salt spray test Load duration 720 h

DIN EN ISO 9227 (NSS) Detachment Cut <3 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 The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous goods, safety data and Healthprotection 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

Print date: Jan 21, 2025

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Page 3/3 | Version 0