### **Technical** Data Sheet





## **PP1004N**

# FREIOTHERM-Powder Coating LF

#### **Product description**

**Product technology** Powder coating for decorative use on exteriors

**Application area** e.g. in the mechanical engineering and plant construction sector

Surface smooth
Gloss value glossy

**Property** Conductive

Running properties good

Gas furnace stability very good

Resistance to light and

weather

good

#### **General product properties**

Binder-Base polyester resir

**Colour** Pure bright colour shades ans white-dependent tones cannot be created.

Gloss value glossy 70-80 GU, Angle 60° DIN EN ISO 2813

**Density** 1,2-1,7 g/cm³ 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

70-90 µm

**Material usage** approx. 0,1 kg/m², layer thickness 70 μm

**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.

DIN EN ISO 9001 | IATF 16949 | EMAS

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theoretical

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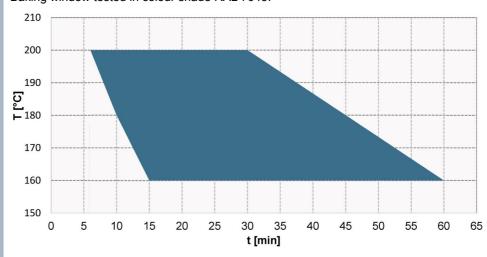




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#### Curing

Recommended object temperature 10 min/180 °C. Baking window tested in colour shade RAL 7045.



Objekt Temperatur in °C Object Temperature in °C	160	180	200
Haltezeit Minimum in Minuten Holding time minimum in minutes	15	10	6
Haltezeit Maximum in Minuten Holding time maximum in minutes	60	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 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 PP1004NRA745	
Cross-cut-test	Gt 0	DIN EN ISO 2409
Cupping test	>4 mm	DIN EN ISO 1520
Impact-test	>70 kg cm (front)	DIN EN ISO 6272-1

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#### **Climatic tests**

Sample description On zinc-phosphated steel plate

product PP1004NRA745

**Condensate constant** 

climate

Load duration 1000 h
Detachment Cut <1 mm
Load duration 500 h

DIN EN ISO 4628-8

DIN EN ISO 6270-2 (CH)

Neutral salt spray test
Load duration
Detachment Cut

500 h DIN EN ISO 9227 (NSS) <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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