Technical Datasheet

FreiLacke

FREOPOX-Powder Coating
PE1101A

Characteristics	
	■ Powder coating primer for high corrosion protection
	■ Application, e.g. in the mechanical engineering and plant construction sector
	■ glossy, smooth
	■ Very good corrosion protection
	■ Good mechanical resistance and surface hardness
	■ Degassing setting

System Coating	
	■ System Liquid Coating
	For various applications, there are coatings available, whose optical appearance regarding colour, gloss degree and surface is in optimum balance.

Technical / Physical Data		
	■ Binder-Base	epoxy resin
	■ Colour	all common colour shades
	■ Gloss value DIN EN ISO 2813	mat 15-30 geometry 60°
	■ Test layer thickness	70 µm by colour RAL 7035
	■ Density calculated	1,2-1,7 g/cm³ colour-dependent
	■ Material usage	0,10 kg/m² with 70 µm mean test layer thickness

Mechanical Test on steel panel ST 1405		
	■ Cross-cut-test DIN EN ISO 2409	Gt 0
	■ Erichsen index DIN EN ISO 1520	>4 mm
	■ Impact-Test DIN EN ISO 6272-1	>60 kg cm (front)

Resistance Test		
	■ Two-layer structure: on a zinc-phosphated steel plate with suitable powder coating top coat system	
	■ Condensate constant climate DIN EN ISO 6270-2 (CH)	720 hours Water ingress Wb < 1 mm DIN EN ISO 4628-8
	■ Salt spray test (NSS) DIN EN ISO 9227	1440 hours Water ingress Wb < 1 mm DIN EN ISO 4628-8
	■ SO2-industry atmosphere DIN EN ISO 3231	30 cycles at 0,2 l SO_2 no change
	■ Chemical resistance	Needs to be checked. The temperature and concentration of chemicals have a major influence on the test outcome.

Processing and application Dependent on plant and buildings	
	■ **Processing / Loading** Corona, Tribo
	■ **Pretreatment** The substrate must be free of adhesion-impairing substances such as oil, grease, rust, scale, rolling skin, wax and separating agent residue.

DIN EN ISO 9001
IATF 16949
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If requirements are more demanding than this, we recommend appropriate levels of phosphatizing or chromatizing.

- **Touch-up coating:** on enquiry

- **Health & Safety at Work guidlines**

  The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous goods, safety data and recommendations concerning Health & Safety at Work and environmental protection can be found in the corresponding safety data sheet.
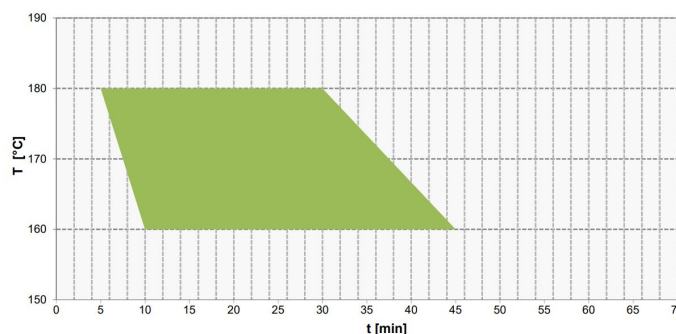
Curing	

- **Object temperature**
  Recommended baking temperature 10 min./160 °C

  Baking window tested in colour shade RAL 7035
  green cross-hatching = baking conditions with good final properties

Objekt Temperatur	°C Object Temperature	°C	160	180			
Haltezeit Minimum	Minuten Holding time minimum	Minutes	10	5			
Haltezeit Maximum	Minuten Holding time maximum	Minutes	45	30			

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.

Specific comments	

- **Protective screening:** 160 μm

- **Compatibility with other powder coatings:** Needs to be checked

- **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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