WA4068GRU999
FREIOTHERM-TRIM-PROTEC

Product description

Product technology	anodic electrocoat paint depositable 1K
Application area	e.g. in the automotive sector
Application	Single coat system
Type of paste	Transparent paste, fully neutralised
Scratch resistance	high scratch resistance

General product properties

Binder-Base	Acrylic Resin	
Colour	colorless	
Viscosity	500-3500 mPa*s	
MEQ-Base-Value	17-24 mg/g	DIN EN ISO 15880
Density	1,0-1,2 g/cm³	theoretical
Solid mass	53-57 %	theoretical
Resistance to storage	approx. 12 month in original packagings at an ambient temperature of 5 to 25 °C. Protect from frost. Open packages are to be used within a short time. 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.	
Gloss value	> 100 GU, Angle 60°	DIN EN ISO 2813
Recommended coating thickness	6-10 µm	
pH-Value	7,5-8,5	DIN 19260
Cunductance	500-1500 µS/cm	
Solid mass	8-12 %	DIN EN ISO 3251
MEQ-Base-Value	25-45 mg/g	DIN EN ISO 15880
Bath Temperature	24-27 °C	
Coating Time	30-90 sec.	
Deposition Voltage	50-150 Volts	

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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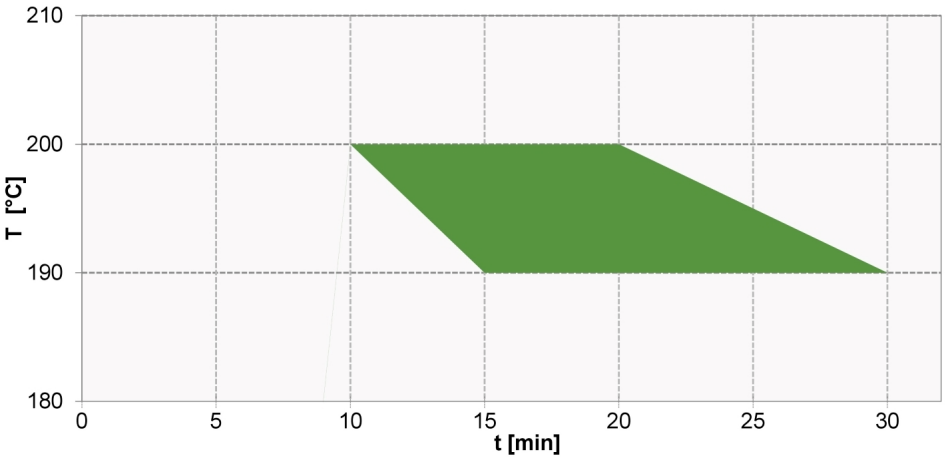
Turn-over	1 Turnover per year To ensure bath stability and thus the coating quality, the specified turnover (solids exchange of the ETL tank) must be observed.
Curing	Recommended object temperature 10 min/200 °C



Objekt Temperatur in °C Object Temperature in °C	**190**	**200**
Haltezeit Minimum in Minuten Holding time minimum in minutes	**15**	**10**
Haltezeit Maximum in Minuten Holding time maximum in minutes	**30**	**20**

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.

Mechanical tests

Test substrate	on aluminium /aluminium pressure casting		
Cross-cut-test	Gt 0		DIN EN ISO 2409

Climatic tests

Test substrate	on aluminium /aluminium pressure casting		
Condensate constant climate	Load duration	600 h	DIN EN ISO 6270-2 (CH)
Neutral salt spray test	Load duration Detachment Cut	600 h <1 mm	DIN EN ISO 9227 (NSS) DIN EN ISO 4628-8

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DIN EN ISO 9001 | IATF 16949 | EMAS

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Climate change test	Load duration	10 Cycles	DIN EN ISO 11997-1 Cycle B
	Detachment Cut	<1 mm	DIN EN ISO 4628-8
Weather-O-Meter	Load duration	1500 h	DIN EN ISO 16474-2 Procedure A1

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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