



## WA4068GRU999 FREIOTHERM-TRIM-PROTEC

### Product description

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

### General product properties

<b>Binder-Base</b>	Acrylic Resin	
<b>Colour</b>	colorless	
<b>Viscosity</b>	500-3500 mPa*s	
<b>MEQ-Base-Value</b>	17-24 mg/g	DIN EN ISO 15880
<b>Density</b>	1,0-1,2 g/cm <sup>3</sup>	theoretical
<b>Solid mass</b>	53-57 %	theoretical
<b>Resistance to storage</b>	<p>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.</p> <p>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.</p>	

### Application and processing

<b>Pretreatment</b>	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.	
<b>Gloss value</b>	> 100 GU, Angle 60°	DIN EN ISO 2813
<b>Recommended coating thickness</b>	6-10 µm	
<b>pH-Value</b>	7,5-8,5	DIN 19260
<b>Cunductance</b>	500-1500 µS/cm	
<b>Solid mass</b>	8-12 %	DIN EN ISO 3251
<b>MEQ-Base-Value</b>	25-45 mg/g	DIN EN ISO 15880
<b>Bath Temperature</b>	24-27 °C	
<b>Coating Time</b>	30-90 sec.	
<b>Deposition Voltage</b>	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.

DIN EN ISO 9001 | IATF 16949 | EMAS

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Revision date: May 29, 2026

Print date: Jun 1, 2026

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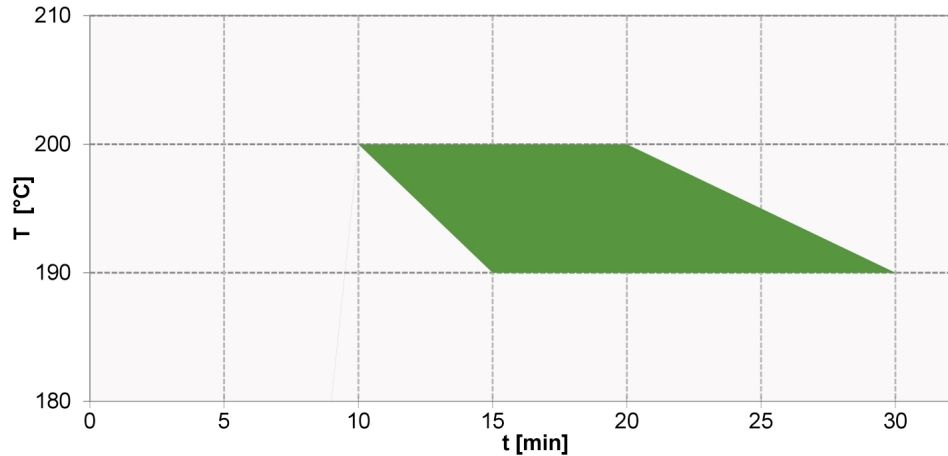
### Turn-over

1 Turnover per year

To ensure bath stability and thus the coating quality, the specified turnover (solids exchange of the tank) must be observed.

### Curing

Recommended object temperature 10 min/200 °C



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

### 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

<b>Test substrate</b>	on aluminium /aluminium pressure casting	
<b>Cross-cut-test</b>	Gt 0	DIN EN ISO 2409
<b>Buchholz penetration test</b>	0,8 mm	DIN EN ISO 2815



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### Climatic tests

<b>Test substrate</b>	on aluminium /aluminium pressure casting		
<b>Condensate constant climate</b>	Load duration	600 h	DIN EN ISO 6270-2 (CH)
<b>Neutral salt spray test</b>	Load duration	600 h	DIN EN ISO 9227 (NSS)
	Detachment Cut	<1 mm	DIN EN ISO 4628-8
<b>Climate change test</b>	Load duration	10 Cycles	DIN EN ISO 11997-1 Cycle B
	Detachment Cut	<1 mm	DIN EN ISO 4628-8
<b>Weather-O-Meter</b>	Load duration	1500 h	DIN EN ISO 16474-2 Procedure A1

### Comments

<b>Work-and Healthprotection</b>	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.
<b>Test conditions</b>	<p>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.</p> <p>The information provided here contains reference values and does not constitute a specification.</p>