### **Technical** Data Sheet





# WA4067GRU999 FREIOTHERM-ATL-ClearTec

#### **Product description**

Product technology anodic electrocoat paint depositable 1K

Application area Application, 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

Density1,0-1,2 g/cm³theoreticalSolid mass53-57 %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.

DIN EN ISO 9001 | IATF 16949 | EMAS | DIN ISO 45001

FreiLacke | Emil Frei GmbH & Co. KG

Am Bahnhof 6 78199 Bräunlingen-Döggingen | Deutschland +49 77071510

www.freilacke.de | info@freilacke.de

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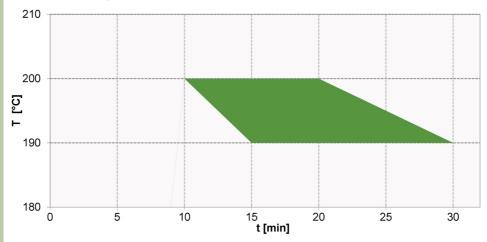
#### Turn-over

#### 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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Climate change test Load duration **DIN EN ISO 11997-1** 10 Cycles

Cycle B

**Detachment Cut DIN EN ISO 4628-8** <1 mm

Load duration 1500 h **DIN EN ISO 16474-2** 

Procedure A1

#### **Comments**

Work-and Healthprotection

Weather-O-Meter

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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