# **Technical** Data Sheet





# WA4450HE1765 FREIOTHERM-ATL-Metallic

### **Product description**

Product technology anodic electrocoat paint depositable 1K

**Application area** e.g. in the functional furniture and storage technology sector

Application Single coat system

Type of paste Subsequent paste filling, partly neutralised

## **General product properties**

Binder-Base Acrylic Resin

**Colour** element silver

**Viscosity** 4000-10000 mPa\*s

MEQ-Base-Value 29-36 mg/g DIN EN ISO 15880

Density1,0-1,3 g/cm³theoreticalSolid mass38-42 %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 40-50 GU, Angle 60° DIN EN ISO 2813

Recommended coating

thickness

15-25 µm

**pH-Value** 8,0-8,8 DIN 19260

**Cunductance** 1300-1600 μS/cm

**Solid mass** 14,0-15,0 % DIN EN ISO 3251

MEQ-Base-Value 43-47 mg/g DIN EN ISO 15880

Organic Solvent Content 2,0-3,6 %

Bath Temperature 24-27 °C

Coating Time 60-180 sec.

Deposition Voltage 70-200 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

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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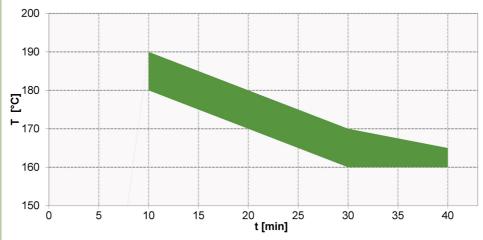
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#### Turn-over

#### 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 20 min/170 °C



| Objekt Temperatur in °C<br>Object Temperature in °C             | 160 | 170 | 180 |
|---|-----|-----|-----|
| Haltezeit Minimum in Minuten<br>Holding time minimum in minutes | 30  | 20  | 10  |
| Haltezeit Maximum in Minuten Holding time maximum in minutes    | 40  | 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.

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## **Mechanical tests**

| Test substrate                   | on steel, purified alkaline |                  |
|----------------------------------|-----------------------------|------------------|
| Cross-cut-test                   | Gt 0                        | DIN EN ISO 2409  |
| Mandrel bending test cylindrical | 8 mm                        | DIN EN ISO 1519  |
| Pencil Hardness                  | 3 H                         | DIN EN ISO 15184 |
| Buchholz penetration test        | 1,0 mm                      | DIN EN ISO 2815  |

## **Climatic tests**

| Test substrate     | on steel, purified alkal     | ine             |   |
|--------------------|------------------------------|-----------------|---|
| Condensate constar | Load duration Detachment Cut | 504 h<br>< 1 mm | DIN EN ISO 6270-2 (CH)<br>DIN EN ISO 4628-8 |

| e standard personal safety precautions must be observed when handling painting aterials. Detailed information about dangerous goods, safety data and  |
|---|
| commendations concerning Health and Safety at Work and environmental protection no be found in the corresponding safety data sheet.   |
| information is based on a standard climate 23/50 DIN EN 23270. All information is sed on our product knowledge an experience. We have no direct influence on the plication itself. Please do not hesitate to contact us for further information.  e information provided here contains reference values and does not constitute a |
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