



## WK4317HRU309 FREIOTHERM-KTL-Acrylate

### Product description

<b>Product technology</b>	cathodic electrocoat paint depositable 2K
<b>Application area</b>	e.g. in the vehicle construction sector
<b>Application</b>	Primer and single coat system
<b>Property</b>	Thick layer application
<b>Type of paste</b>	Pigment paste, fully neutralised

### General product properties

<b>Binder-Base</b>	Acrylic Resin, modified
<b>Colour</b>	Oxide red
<b>Viscosity</b>	2000-6000 mPa*s
<b>Density</b>	1,1-1,4 g/cm <sup>3</sup> <span style="float: right;">theoretical</span>
<b>Solid mass</b>	63-67 % <span style="float: right;">theoretical</span>
<b>Resistance to storage</b>	<p>approx. 9 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>	50-70 GU, Angle 60°	DIN EN ISO 2813
<b>Mixin ratio</b>	Products WK4045 : WK4317 Parts by weight 2:1	
<b>Recommended coating thickness</b>	17-35 µm	
<b>pH-Value</b>	4,5-5,5	DIN 19260
<b>Cundctance</b>	1000-1400 µS/cm	
<b>Solid mass</b>	14-16 %	DIN EN ISO 3251
<b>Organic Solvent Content</b>	1,0-3,0 %	
<b>Bath Temperature</b>	32-34 °C	
<b>Coating Time</b>	120-240 sec.	

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

Page 1/3 | Version 0

Revision date: Jan 25, 2024

Print date: Jan 25, 2024

FreiLacke | Emil Frei GmbH & Co. KG

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

[www.freilacke.de](http://www.freilacke.de) | [info@freilacke.de](mailto:info@freilacke.de)



## WK4317HRU309 FREIOTHERM-KTL-Acrylate

### Deposition Voltage

130-250 Volts

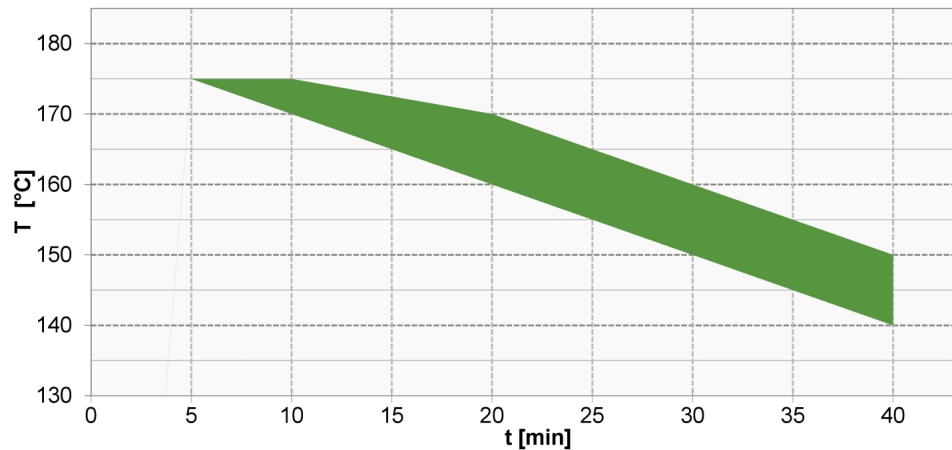
### Turn-over

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 20 min/160 °C



Objekt Temperatur in °C Object Temperature in °C	<b>150</b>	<b>160</b>	<b>170</b>	<b>175</b>
Haltezeit Minimum in Minuten Holding time minimum in minutes	<b>30</b>	<b>20</b>	<b>10</b>	<b>5</b>
Haltezeit Maximum in Minuten Holding time maximum in minutes	<b>40</b>	<b>30</b>	<b>20</b>	<b>10</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.



## WK4317HRU309 FREIOTHERM-KTL-Acrylate

### Mechanical tests

<b>Test substrate</b>	on zinc phosphate		
<b>Cross-cut-test</b>	Gt 0		DIN EN ISO 2409
<b>Cupping test</b>	5 mm		DIN EN ISO 1520
<b>Mandrel bending test cylindrical</b>	8 mm		DIN EN ISO 1519

### Climatic tests

<b>Test substrate</b>	on zinc phosphate		
<b>Condensate constant climate</b>	Load duration	504 h	DIN EN ISO 6270-2 (CH)
	Detachment Cut	<0,5 mm	DIN EN ISO 4628-8
<b>Neutral salt spray test</b>	Load duration	480 h	DIN EN ISO 9227 (NSS)
	Detachment Cut	<3 mm	DIN EN ISO 4628-8

### Chemical resistance

<b>Test substrate</b>	on zinc phosphate		
<b>Influencing factors</b>	The chemical resistance depends on the concentration, temperature, exposure time and test method. This has to be checked depending on the application.		

### 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>