



## WK4997HRU905 FREIOTHERM-KTL-Automotive

### Product description

<b>Product technology</b>	cathodic electrocoat paint depositable 2K
<b>Application area</b>	e.g. in the mechanical engineering and plant construction sector
<b>Application</b>	Primer
<b>Type of paste</b>	Pigment paste, fully neutralised
<b>Corrosion protection</b>	good

### General product properties

<b>Binder-Base</b>	Epoxy Resin, modified	
<b>Colour</b>	Jet black	
<b>MEQ/s-Value</b>	47-52 mmol/100g	DIN EN ISO 15880
<b>Density</b>	1,1-1,4 g/cm <sup>3</sup>	theoretical
<b>Solid mass</b>	44-48 %	theoretical
<b>Resistance to storage</b>	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.	
	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

<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>	50-60 GU, Angle 60°	DIN EN ISO 2813
<b>Mixin ratio</b>	The mixing ratio is dependent on various factors and is therefore coordinated with the relevant system in cooperation with the application technology department.	
<b>Recommended coating thickness</b>	15-20 µm	
<b>pH-Value</b>	5-6	DIN 19260
<b>Cunductance</b>	1100-1600 µS/cm	
<b>Solid mass</b>	13-16 %	DIN EN ISO 3251
<b>MEQ/b-Value</b>	5,5-7,0 mmol/100g	VDA 621-190
<b>Organic Solvent Content</b>	1,5-3,0 %	
<b>Bath Temperature</b>	32-34 °C	

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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### Coating Time

120-240 sec.

### Deposition Voltage

150-350 Volts

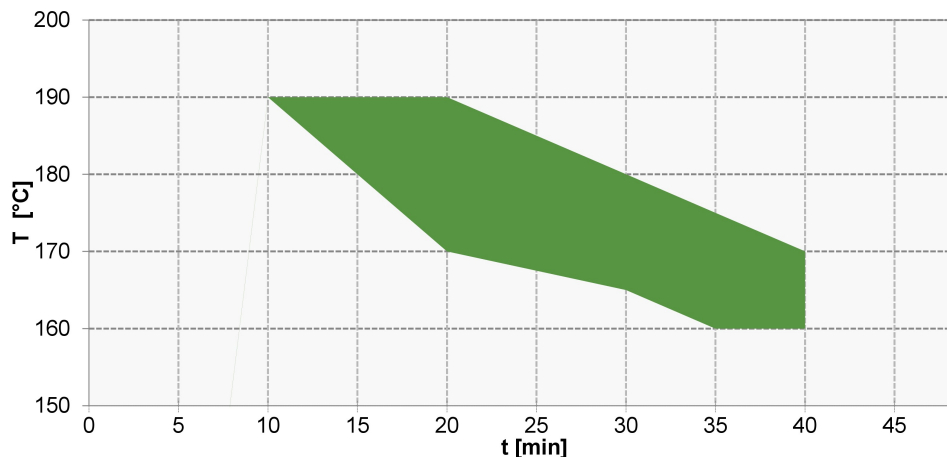
### Turn-over

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/170 °C



Objekt Temperatur in °C Object Temperature in °C	160	170	180	190
Haltezeit Minimum in Minuten Holding time minimum in minutes	35	20	15	10
Haltezeit Maximum in Minuten Holding time maximum in minutes	40	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 iron phosphating		
Cross-cut-test	Gt 0		DIN EN ISO 2409

Climatic tests

Test substrate	on iron phosphating		
Neutral salt spray test	Load duration	700 h	DIN EN ISO 9227 (NSS)
	Detachment Cut	<1 mm	DIN EN ISO 4628-8

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.		