Technical Data Sheet

FreiLacke

WK4314HK2687
FREIOTHERM-KTL-Acrylate

Product description

Product technology	cathodic electrocoat paint depositable 2K
Application area	e.g. in the vehicle construction sector
Application	Primer and single coat system
Property	Thick layer application
Type of paste	Pigment paste, fully neutralised
Resistance to light and weather	very good

General product properties

Binder-Base	Acrylic Resin, modified	
Colour	kverneland red	
Viscosity	2000-6000 mPa*s	
Density	1,1-1,4 g/cm³	theoretical
Solid mass	63-67 %	theoretical
Resistance to storage	approx. 9 month in original packagings at an ambient temperature of 5 to 30 °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	60-70 GU, Angle 60°	DIN EN ISO 2813
Mixin ratio	Products WK4025 : WK4314 Parts by weight 2:1	
Recommended coating thickness	40-50 µm	
pH-Value	4,5-5,5	DIN 19260
Cunductance	1000-1400 µS/cm	
Solid mass	14-16 %	DIN EN ISO 3251
Organic Solvent Content	1,0-3,0 %	
Bath Temperature	32-34 °C	

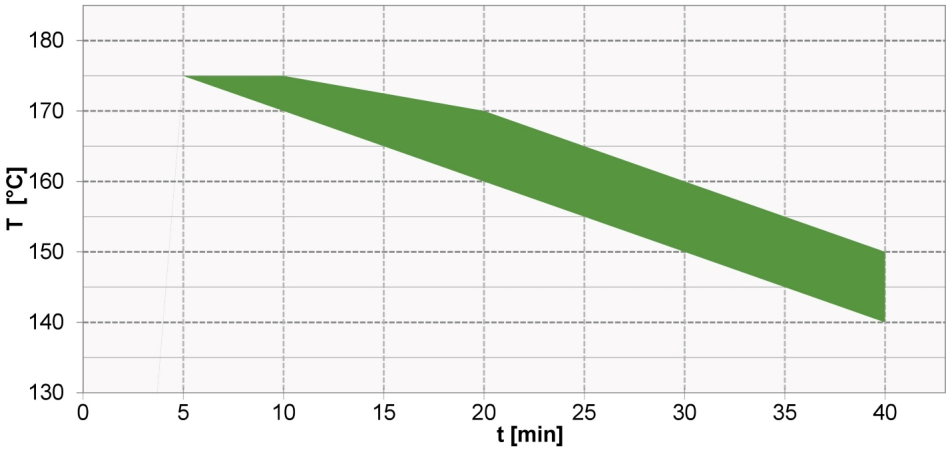
Our technical data sheets are to provide you with advice based on our latest state of knowledge.
This guidance does not release you from your own obligation to test our products for their suitability for your intended purposes and applications.
The sale of our products is in accordance with our terms of business, delivery and payment.

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Coating Time	120-240 sec.
Deposition Voltage	200-350 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/160 °C



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

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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DIN EN ISO 9001 | IATF 16949 | EMAS

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Mechanical tests

Test substrate	on zinc phosphate		
Cross-cut-test	Gt 0		DIN EN ISO 2409
Cupping test	6 mm		DIN EN ISO 1520
Mandrel bending test cylindrical	8 mm		DIN EN ISO 1519
Multi-impact test method B	Characteristic value 2,5		DIN EN ISO 20567-1

Climatic tests

Test substrate	on zinc phosphate		
Condensate constant climate	Load duration Detachment Cut	504 h <0,5 mm	DIN EN ISO 6270-2 (CH) DIN EN ISO 4628-8
Neutral salt spray test	Load duration Detachment Cut	480 h <2 mm	DIN EN ISO 9227 (NSS) DIN EN ISO 4628-8
Weather-O-Meter	Load duration	504 h	DIN EN ISO 16474-2 Procedure A1
QUV/B-313 test	Load duration	504 h	DIN EN ISO 16474-3 Procedure C

Chemical resistance

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

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.

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