

FREIOTHERM-Electrocoating

KTL – acrylat, clearcoat

General description: bath-material WK4030GRU999

1. General

- name: FREIOTHERM-KTL-bath-acrylat
- cathodic electrocoating system
- for uv- and corrosion-resistant one coat systems

2. Product-properties

- Resin-base: modified polyacrylic resin
- Colour: colourless
- Gloss: glossy
- Mixing ratio: first filling (appr. 18% by weight)= 1,8 parts by weight VE-Water
= 1,0 part by weight refilling-paste
- Stoving-conditions: 160°C – 30 minutes until
190°C – 10 minutes/ object-temperature
- Good light-resistance
- Good corrosion – resistance
- Compatible with WK4032MRU999 in every ratio

3. Application-properties

- Application for lamp screen, eyeglasses, lighters, door handles
One coat systems with good uv- and corrosion-resistance.
- Substrates: Steel DIN 1623, non-ferrous metals, galvanized substrates, Aluminium
- Pre-treatment: The substrate must be free of materials which prevent adhesion, e.g. oil, grease, dust and surfactant. Alcaline cleaning with following iron-bondesize-system or zinc-phosphate.
Alternative only degreasing iron-bondesize-system.

4. Bath-parameters

Dependes on the individual plant-conception

<u>Examination:</u>	<u>value:</u>	<u>unit :</u>	<u>in accordance :</u>
pH-value	4,3 to 4,8	--	DIN 19260
Conductivity	900 to 1400	µs / cm	--
Solid	15,0 to 19,0	weight %	DIN EN ISO 3251
MEQ/ b-value	8,0 to 9,0	--	
Temperature	28 to 30	°C	--
Organic solvent	1,0 to 5,0	weight %	--

5. Coating-terms

Dependent on attitude and use-area.

<u>Method:</u>	<u>value:</u>	<u>unit:</u>
Coating-time	15 to 60	seconds
Voltage	30 to 100	Volt
Film thickness	5 to 15	µm
Ratio of electrodes	4 to 6	: 1
Steel quality	stainless steel V4A = 1.4571	

6. Physical-properties

All statements are based on norm-atmosphere 20 / 65 DIN 50014.

Freshly filled cathodic EDP-bath without any detracting from probably ions which are brought in by the process.

<u>Method:</u>	<u>value:</u>	<u>unit:</u>	<u>in accordance:</u>
Gloss	110 to 140	GE	DIN 6753
Adhesion	GT 0	--	DIN EN ISO 2409
Hardness	125	--	DIN EN ISO 2815
Erichsen test	3,5 to 6,0	mm	DIN EN ISO 1520
Pencil hardness	4 H	--	Wolff-Wilborn
Resistance against fruit acid	mark 0 to 1		DIN 8964-B2
QUV-Test	500 h : ΔE < 0,5	--	
Hand sweat resistance	O.K.	--	--

7. Chemical-properties

Lacquer-film-data tested on aluminium

Stoving conditions: 170°C / 20 minutes object temperature

Film thickness: 14 µm + / - 2

Testing:	Saltspray test	Humidity test
Degree of rusting DIN 53210	1008 h DIN 50021	1008 h DIN 50017
Edge corrosion DIN 53230	Ri 0	Ri 0
Blistering DIN 53209	Kr 0	Kr 0
Infiltration DIN 53167	Edge: m0 / g0	Edge: m0 / g0
	Wb <1 mm	Wb < 0,5 mm

8. General hints

The corrosion resistant is influenced strongly by the substrate and by the quality of the pretreatment.

The edge-corrosion is practice-part to assess separately for everyone, since according to " edge-sharpness " different results can result.

9. Bath-stability

2 „turn-over“ / year

More information contains our safety - and technical data sheets.