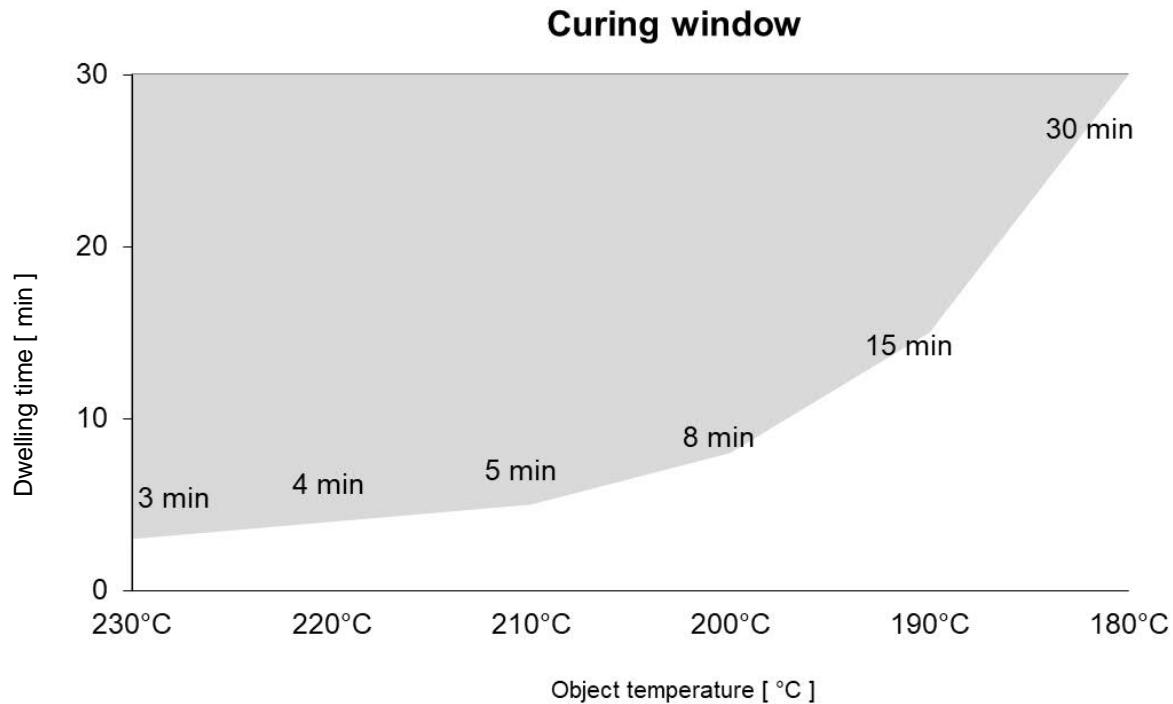


## Product Datasheet

### Resicoat® EL Coating for Busbar by Electrostatic Spray Application Code: HLF59R

Product Description	Resicoat® EL HLF59R is a one part, 100 % solids, epoxy powder coating for insulation of wire and busbars. Designed for electrostatic spray application it has excellent resistance against heat, chemicals and moisture. The coating has a good edge coverage and flexibility. It is serviceable up to 130° C.		
	Typical value	Method	
Powder Properties	<b>Binder System</b>	Epoxy resin	
	<b>Density</b>	1.75 – 1.85 g/cm <sup>3</sup>	ISO 8130-2
	<b>Gel time at 200° C</b>	30 – 50 sec.	modified ISO 8130-6
	<b>Storage stability</b>	12 months from date of manufacture at ≤ 23° C	
Application Data	<b>Preheating temperature</b>	190 – 235° C object temperature	
	<b>Post cure conditions</b>	5 – 10 min. at above temperature	
	<b>Particle size distribution</b>	< 32 µm = 25 – 40 % < 160 µm > 99.5 %	Malvern ISO 8130-1
Material Properties	<b>Color</b>	grey, ca. RAL 7047	
	<b>Recommended film thickness</b>	200 – 300 µm	
	<b>Flow</b>	smooth	
	<b>Gloss at 60° angle</b>	40 – 60 units	ISO 2813
	<b>Cross cut</b>	Gt 0	ISO 2409
	<b>Impact resistance</b>	> 5 Joule	DIN 3476-1
	<b>Elongation</b>	> 5 %	DIN 3476-1
	<b>Hardness</b>	> 100	ISO 2815
	<b>Pencil hardness</b>	5 H	DIN EN 13523-4
	<b>Glass transition temperature</b>	65 ± 7° C (Tg1) 112 ± 5° C (Tg2) 40 – 60 J/g (Delta H)	ISO 11357-2 Inflection point Inflection point
	<b>Temperature index</b>	130° C (Class B)	IEC 60216-1
	<b>Water absorption (40 h / 23° C)</b>	< 1 %	ASTM D 570
	<b>Thermal conductivity</b>	0.4 – 0.5 W/(m · K)	DIN EN 821
Typical Electrical Properties	<b>Specific surface resistivity</b>	> 10 <sup>13</sup> Ω	IEC 60093
	<b>Dielectric strength</b>	45 kV/mm	IEC 60243-1
	<b>Dissipation factor tan δ, 25° C</b>	< 0.01	ASTM D 150
	<b>105° C</b>	< 0.01	ASTM D 150
	<b>Dielectric constant (100 Hz – 1 MHZ)</b>	4.0	ASTM D 149
	<b>Comparative tracking index (CTI)</b>	CTI 600 / CTI 175M-1.1	IEC 60112
	<b>UL 94 Vertical Burning Test</b>	V-0	IEC 60695-11-10

<b>Typical Electrical Properties (continued)</b>	<b>Hot wire ignition (HWI)</b>	≥ 120 sec.	IEC 60695-2-20
	<b>High current arc ignition (HAI)</b>	≥ 150	UL 746A Section 32
<b>Approvals</b>	UL 746B	130° C	File E214934
	UL 94 (flame retardancy)	V-0	File E214934
	Listed as Resicoat EL grey PB		



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Disclaimer: This Product Data Sheet is based on the present state of our knowledge and on current laws. The data referring to Powder Properties, Application Data and Physical Tests is based on lab based samples. Factors such as quality or condition of the substrate may have an effect on the use and application of the product. It remains the responsibility of the user to test thoroughly if the product is applicable for the intended use. The use of the product beyond our recommendation releases us from our responsibility, unless we have recommended the specific use in writing. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. We are not liable for any application-technological advice. The Product Data Sheet shall be updated from time to time. Please ensure you have the latest version before using the product. All products and Product Data Sheets are subject to our standard terms and conditions of sale (GCS). You can receive the latest copy of GCS via internet or our post address. Brand names mentioned in this Product Data Sheet are trademarks of or are licensed to the AkzoNobel group.