

## Product Datasheet

### Resicoat® EL3 Coating for Busbar by Fluidized Bed Application Code: HFD15R

<b>Product Description</b>	Resicoat® EL3 HFD15R is a one part, 100 % solids, epoxy powder coating for insulation of wire and busbars. Designed for fluidized bed application with post curing, it has UL 1446 class F recognition with good resistance against heat, chemicals and moisture. The coating has a high level of consistent edge coverage.		
		<b>Typical value</b>	<b>Method</b>
<b>Powder Properties</b>	<b>Binder System</b>	Epoxy resin	
	<b>Density</b>	1.70 – 1.80 g/cm <sup>3</sup>	ISO 8130-2
	<b>Gel time at 200° C</b>	15 – 30 sec.	modified ISO 8130-6
	<b>Storage stability</b>	6 months from date of manufacture at ≤ 23° C 9 months from date of manufacture at ≤ 15° C	
<b>Application Data</b>	<b>Preheating temperature</b>	180 – 200° C object temperature	
	<b>Post cure conditions</b>	10 min. 200° C object temperature	
	<b>Particle size distribution</b>	< 32 µm = 15 – 30 % < 200 µm > 99.5 %	Malvern ISO 8130-1
<b>Material Properties</b>	<b>Color</b>	Orange, ca. RAL2003	
	<b>Recommended film thickness</b>	400 – 1500 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 at 400 µm	DIN 3476-1
	<b>Elongation</b>	> 3 %	DIN 3476-1
	<b>Hardness</b>	> 100	ISO 2815
	<b>Pencil hardness</b>	5H	DIN EN 13523-4
	<b>Glass transition temperature</b>	56 ± 7° C (TG1) 114 ± 6° C (TG2) 40 – 70 J/g (ΔH)	ISO 11357-2
<b>Typical Electrical Properties</b>	<b>Specific surface resistivity</b>	> 10 <sup>13</sup> Ω	IEC 60093
	<b>Dielectric strength</b>	> 30 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	IEC 60112
	<b>UL 94 Vertical Burning Test</b>	V-0	IEC 60695-11-10
	<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>	<b>UL 1446</b> <b>UL 94 (flame retardancy)</b>	Class: F (155° C) V-0	to be approved on customer request to be approved on customer request
<b>Date of issue:</b>	<b>July 8, 2022</b>		
<b>Authorized by:</b>	<b>GK</b>		
<b>Revision No.:</b>	<b>1</b>		

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.