

Product Datasheet

Resicoat® EL201 Coating for Cores and Busbars by Electrostatic Spray Application Code: HLG03R

Product Description	Resicoat® EL201 HLG03R is a one part, 100 % solids, epoxy powder coating for insulation of cores, wire and busbars. Designed for electrostatic spray application requiring post cure, it has UL 94 (V-0) approval with good resistance to heat, chemicals and moisture. The coating has a high level of flexibility and consistent edge coverage.		
Powder Properties		Typical value	Method
Powder Properties	Binder system	Epoxy	
	Density	1.40 – 1.50 g/cm ³	ISO 8130-2
	Gel time at 160° C	130 – 220 sec.	modified ISO 8130-6
	Storage stability	6 months from date of manufacture at ≤ 23° C 9 months from date of manufacture at ≤ 15° C	
Application Data	Curing conditions	10 – 15 min., 160 – 180° C object temperature	
	Particle size distribution	< 32 µm = 20 – 40 % < 160 µm = 98 – 100 %	Malvern ISO 8130-1
Material Properties	Color	grey, ca. RAL 7040 GL	
	Recommended film thickness	100 – 300 µm	
	Flow	smooth	
	Gloss at 60° angle	> 70 units	ISO 2813
	Hardness	> 90	DIN EN ISO 2815
	Glass transition temperature	Tg2 > 100° C	DSC 20K/min.
	Water soak	2.5 %	2 h, 90° C (free film)
	Abrasion (CS17, 1000 cycles, 1 kg)	10 mg	ASTM D 4060 (Taber)
	Cross cut	Gt 0	DIN EN ISO 2409
	Resistance to cold	o.K. at -45° C, 16 h o. K. at -65° C, 96 h	DIN EN 60068-2-1
Typical Electrical Properties	Specific surface resistivity	> 10 ¹³ Ω	IEC 60093
	Dielectric strength	> 30 kV/mm	IEC 60243-1
	Dissipation factor tan δ 25° C	< 0.01	ASTM D 150
	105° C	< 0.01	ASTM D 150
	Dielectric constant (100 Hz – 1 MHz)	4.0	ASTM D 149
	Comparative tracking index	CTI 500 M	DIN EN 60112
	Thermal expansion coefficient	4,9 ± 10 ⁻⁵ 1/K	ASTM D 696
	Thermal conductivity 25° C	0.20 – 0.30 W/(m · K)	DIN EN 821
	80° C	0.25 – 0.35 W/(m · K)	
	Thermal emission factor	0.88 ± 0.02	(90 – 150° C)
	Temperature index	130° C	IEC 60216-1

Approvals	UL 94 (flame retardancy) Listed under EL201	V-0	File E214934
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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.