

# Product Data Sheet

## AkzoNobel Powder Coatings

### Resicoat® EL201 Coating for Cores and Busbars by Electrostatic Spray Application HFF09QF Safety Orange

<b>Product Description</b>	Resicoat® EL201 HFF09QF 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.	
	<b>Typical Value</b>	<b>Method</b>
<b>Powder Properties</b>	<b>Chemical type</b>	Epoxy
	<b>Gel Time</b>	45 - 85 sec ASTM D4217
	<b>Specific gravity</b>	1.45 ± 0.05 g/cm <sup>3</sup> (Calculated)
	<b>Coverage @ 1.0 mil</b>	149 ft <sup>2</sup> /lb/mil (Calculated)
	<b>Storage Stability</b>	6 months from date of manufacture at ≤ 75°F (23° C) 9 months from date of manufacture at ≤ 60°F (15° C)
<b>Application Data</b>	<b>Application Method</b>	Electrostatic Spray onto Hot Part
	<b>Recommended Film Thickness</b>	4 – 12 mils (100µm - 300µm)
	<b>Curing schedule</b> (At Object Temperature)	Preheat: Object temp at 300 - 325°F (149 – 163°C) Postheat: 10 - 15 minutes at 320 - 356°F (160 - 180°C)
<b>Material Properties</b>	<b>Appearance</b>	Smooth
	<b>Gloss level (Gardner 60°)</b>	> 70 Units
	<b>Hardness</b>	> 90 DIN EN ISO 2815
	<b>Glass Transition Temperature</b>	Tg2 > 212°F (100°C) DSC 20K/min.
	<b>Water Soak</b>	2.5% 2h, 90°C (Free Film)
	<b>Abrasion (CS17, 1000 cyc, 1Kg)</b>	10 mg loss ASTM D 4060 (Taber)
	<b>Cross Cut</b>	Gt 0 DIN EN ISO 2409
	<b>Thermal Conductivity</b>	0.164 W/(m*K) ASTM E1461
	<b>Specific Heat</b>	1.090 J/g/K ASTM E2716
<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</b>	CTI 500 M DIN EN 60112
	<b>Thermal Expansion Coefficient</b>	4,9 x 10 <sup>-5</sup> in/in/°C ASTM D 696
	<b>Thermal Emission Factor</b>	0.88 ± 0.02 (90 – 150°C)
	<b>Temperature Index</b>	130°C IEC 60216-1
<b>Pre-treatment</b>	Steel surfaces to be coated must be clean and free from grease. For maximum protection, it is essential to pre-treat components prior to the application of Resicoat® EL. Iron phosphate and zinc phosphate of ferrous metals improve corrosion resistance.	

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**Application**      **Resicoat® EL** powders can be applied by manual or automatic electronic spray equipment or via fluid bed for high film builds. It is recommended that for consistent application and appearance product be fluidized during application. Unused powder can be reclaimed using suitable equipment and recycled through the coating system.

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**Approvals**      **UL 94 (Flame Retardancy)**      V-0      File E214934  
Listed under EL201

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**Safety Precautions**      Please consult the Safety Datasheet (SDS).

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**Disclaimer**      **IMPORTANT NOTE:** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. 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. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product.

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