

Product Data Sheet

AkzoNobel Powder Coatings

Resicoat® EL Epoxy powder Coating for Electrical Components HLD05QF (formerly 17-7021)

Product Description	Resicoat® EL HLD05QF (ECB-1363A 17-7021 E-G) Gray is a solid, melt-mixed thermoset epoxy coating powder primarily designed for electrical applications. It is a hard coating with exceptionally good high temperature cut-through resistance and provides excellent mechanical and thermal shock resistance without fracturing, even on parts which are mechanically distorted.		
	The powder is particularly useful for integral insulation of stators & rotors of motors, toroidal cores, motor & transformer cores, bus bars and bus bar connectors.		
Powder Properties	Chemical type	Epoxy	
	Appearance	Smooth	
	Color	Gray	
	Specific gravity	1.81 ± 0.05 g/cm ³ (Calculated)	
	Coverage @ 1.0 mil	106 ft ² /lb/mil (Calculated)	
	Storage	Maximum 74°F	
	Shelf life	12 months	
Application Data	Application Method	Fluid Bed	
	Application Temperature	400°F (204°C)	
	Recommended Film thickness	10 mils minimum (250µ minimum)	
	Curing schedule (at object temperature)	15 minutes at 375°F (191°C) 10 minutes at 400°F (204°C) 5 minutes at 450°F (232°C)	
	Particle Size Distribution	60 mesh: 0-1%	ASTM D 3451 (% Retained)
	325 mesh: 60-65%	Alpine Jet Sieve	
Typical Performance Characteristics	Hardness, Shore D	ASTM D2240	94
	Tensile Strength	ASTM D638	7500 psi
	Impact Resistan (Direct)	ASTM 2794	140 min
	Coefficient of Thermal Expansion	ASTM D696	3 x 10 ⁻⁵ in/in/°C
	Dielectric Constant	ASTM D150	5.8
	Dielectric Strength @ 10 mils	ASTM D149	800 volts/mil
	Thermal Shock Resistance		Passes 12 cycles (+400°F to -20°F)
	Dielectric Loss Factor	ASTM D150	0.09
	Thermal Conductivity	ASTM E1461	0.660 W/(m*K)
	Total Mass Loss (%TML)	ASTM E595	0.46
Collected Volatiles (%CVCM)	ASTM E595	0.01	

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

Approvals This product is UL OCTD2.E34521 recognized to UL746B; Designation ECB-1363A. For UL OCTD2.E34521, following is the applicable data.

Min Film Thickness (mm)	Metal Thickness (mm)	Flame Class UL-94	HWI	HAI	RTI Elec (°C)	RTI Imp (°C)	RTI Str (°C)	CTI
0.05	3.3	V-0	-	-	130	130	130	0
0.25	1.0	-	0	0	130	130	130	-

Safety Precautions Please consult the Safety Datasheet (SDS).

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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