

Product Data Sheet

AkzoNobel Powder Coatings

Resicoat® EL Epoxy Powder Coating for Electrical Components HGD45QF (Formerly AG111QF / 17-4001) ECB-1363A Red 203

Product Description	Resicoat® EL HGD45QF ECB-1363A Red 203 is an electrical grade functional epoxy powder coating designed for use in a wide variety of electrical, mechanical, and chemical applications. Made of hard, high edge coverage materials, HGD45QF is ideal for the integral insulation of electric motor cores, low and high voltage bus bars, hermetic connectors, and watt-hour meter coils.			
Powder Properties	Chemical type	Epoxy		
	Appearance	Smooth		
	Gloss level (Gardner 60°)	65 ± 5		
	Gel Time	ASTM D4217	45 – 85 sec	
	Specific gravity	1.75 ± 0.05 g/cm ³ (Calculated)		
	Coverage @ 1.0 mil	110 ft ² /lb/mil (Calculated)		
	Storage	Maximum 80°F		
	Shelf life	12 months		
	Particle Size Distribution	Alpine Jet Sieve	44µm: 65 – 100% Retention 105 µm: 35 – 50% Retention 210 µm: 0 – 4% Retention 250 µm: 0% Retention	
	Application Data	Application Method	Fluid Bed	
Recommended Film thickness		10 – 120 mils (250µ - 3000µ)		
Curing schedule (At Object Temperature)		Preheat: Object temp at 400°F Postheat: 10 minutes at 450°F		
Typical Performance Characteristics	Hardness, Shore D	ASTM D2240	94	
	Tensile Strength	ASTM D638	7500 psi	
	Edge Coverage	ASTM 2967	>45%; Method "A" @ 12-18 mils	
	Thermal Conductivity	ASTM E1461	0.406 W/(m*K)	
	Coefficient of Thermal Expansion	ASTM D696	3.4 x 10 ⁻⁵ in/in/°C	
	Dielectric Constant	5.8		
	Dielectric Strength	ASTM D149	800 volts/mil	
	Thermal Shock Resistance	Passes 12 cycles (+400°F to -20°F)		
Pre-treatment	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.			
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.			

Approvals

This product is UL OCTD2.E34521 recognized to UL 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	RTI Imp	RTI Str	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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Product History

Through acquisitions of companies over the years, this product has been renamed several times throughout the years.

Corvel 17-6007A – Red 203 was introduced by Polymer Corp in the early 1980's.

AG111QF Interpon 100 – Product was renamed when AkzoNobel acquired Rohm & Haas in 2010.

HGD45QF Resicoat EL – Product is re-coded to align with business' best practice in Oct 2020.

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