



## Functional Powder Coatings

### Resicoat® EL

#### Coating for Ferrites by Fluidized Bed Application

Code: HGC20R

#### Product Description

Resicoat® EL HGC20R is a 100 % solids, epoxy powder coating for insulation of ferrites and electrical connections. It is designed for fluidized bed application and meets UL 94 (V-0). Resicoat® EL HGC20R has an excellent resistance against heat, chemicals and moisture. The coating has an excellent thermal endurance according IEC 60455-3-11 with a high level of flexibility and consistent edge coverage.

#### Powder Properties

	Typical value	Method
Binder system	Epoxy	
Density	1.40 – 1.50 g/cm <sup>3</sup>	ISO 8130-2
Gel time at 200° C	30 – 50 sec.	modified ISO 8130-6
Storage stability	4 months from delivery date at ≤ 23° C	

#### Application Data

Preheating temperature	180 – 220° C object temperature	
Post cure conditions	e. g. 5 mm steel 190° C / 5 min.	
Particle size distribution	< 32 µm = 10 – 25 %	Malvern
	< 200 µm = 99 – 100 %	ISO 8130-1

#### Material Properties

Color	red-brown, approx. RAL 3011 GL	
Recommended film thickness	200 – 300 µm	
Flow	smooth	
Gloss at 60° angle	70 – 90 units	DIN 67530
Cross cut	Gt 0	DIN EN ISO 2409
Impact resistance	> 5 Joule	DIN 30677-2
Elongation	> 5 %	DIN 30677-2
Hardness	> 90	DIN EN ISO 2815
Tests acc. UL 746 A:		
Water absorption (40 h / 23° C)	0 %	ASTM D 570
Dissipation factor dielectric constant	0.0070	ASTM D 150
Surface resistivity	> 10 <sup>15</sup> Ω	ASTM D 257
Volume resistivity	> 10 <sup>15</sup> Ω	ASTM D 257
Dielectric strength	= 45 kV/mm	ASTM D 149

#### Approval

UL 94 (Flame retardancy)	V-0	Resicoat® EL HGC20R meets UL 94 V-0 (to be approved on customers request)
Temperature index	130° C	IEC 60216-1

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