

## Epoxy Conductive Paint Comparison Chart

	841ER	843ER
<b>UNCURED PROPERTIES</b>		
Conductive filler	Ni (nickel)	Ag/Cu (silver coated copper)
Format	Liquid	Liquid
Color	Grey	Metallic brown
Mix ratio by weight	100:25	100:28
Mix ratio by volume	100:38	100:36
Solids percentage	32%	30%
Density @25 °C [77 °F]	1.81 g/mL	1.00 g/mL
Viscosity @25 °C [77 °F]	200 cP (part A), 18 cP (part B)	35 cP (part A), 9.0 cP (part B)
<b>Coverage &amp; Application Properties</b>		
Ready to spray	Yes	Yes
Theoretical HVLP spray coverage	≤18 200 cm <sup>2</sup> /L	≤31 100 cm <sup>2</sup> /L
Working time	4 h	8 h
Dry to touch	5 min	3 min
Ambient full cure @22 °C [72 °F]	Heat cure only	Heat cure only
Elevated full cure	4 h @65 °C [149 °F] <sup>a)</sup> 2 h @80 °C [176 °F] <sup>a)</sup> 1 h @100 °C [212 °F] <sup>a)</sup>	4 h @65 °C [149 °F] 2 h @80 °C [176 °F] —
<b>CURED PROPERTIES</b>		
<b>Electrical Properties</b>		
Resistivity	3.0 x 10 <sup>-2</sup> Ω·cm	1.8 x 10 <sup>-3</sup> Ω·cm
Surface resistance @50 μm	4.3 Ω/sq	0.31 Ω/sq
Attenuation from 0.01 to 18 000 MHz	34 dB ± 20 dB	60 dB ± 12 dB
Salt fog test @35 °C [95 °F], 96 h	TBD	Before: 0.15 Ω/sq After: 0.73 Ω/sq
<b>Thermal Properties</b>		
Constant service temperature	-40–150 °C [-40–302 °F]	-40–120 °C [-40–248 °F]
<b>Mechanical Properties</b>		
Adhesion	5B	5B
Pencil hardness	4H, hard	6H, hard
<b>Magnetic Properties</b>		
Magnetic class	Ferromagnetic (magnetic)	Diamagnetic (non-magnetic)
Relative permeability	≥100	<1.0

a) After heat cure, let sit for 30 minutes at room temperature before handling.