

## Water-based Conductive Paint Comparison Chart

	841WB	843WB	842WB
<b>UNCURED PROPERTIES</b>			
Conductive filler	Ni (nickel)	Ag/Cu (silver coated copper)	Ag (silver)
Format	Liquid	Liquid	Liquid
Color	Grey	Light metallic brown	Silver
Percent solids	60%	42%	60%
Density @25 °C [77 °F]	1.81 g/mL	1.32 g/mL	1.50 g/mL
Viscosity @25 °C [77 °F]	143 cP	660 cP	195 cP
Calculated VOC	28 g/L	37 g/L	37 g/L
Shelf life	2 y	2.5 y	3 y
<b>Coverage &amp; Application Properties</b>			
Ready to spray	Yes	Yes	Yes
Theoretical HVLP spray coverage	≤23 200 cm <sup>2</sup> /L	≤30 500 cm <sup>2</sup> /L	≤21 200 cm <sup>2</sup> /L
Dry to touch (for plastics)	30 min	20 min	20 min
Dry to touch (for dry wall)	7 min	5 min	5 min
Cure time @25 °C [77 °F]	24 h	24 h	24 h
Cure time @65 °C [149 °F]	3 h	2.5 h	3 h
<b>CURED PROPERTIES</b>			
<b>Electrical Properties</b>			
Resistivity	0.027 Ω·cm	0.00053 Ω·cm	0.000075 Ω·cm
Surface resistance @50 μm	1.3 Ω/sq	0.020 Ω/sq	0.0020 Ω/sq
Attenuation from 0.01 to 18 000 MHz	46 dB ± 16 dB	61 ± 12 dB	65 ± 11 dB
Salt fog test @35 °C [95 °F], 96 h	Before: 0.4 Ω/sq After: 3 Ω/sq	TBD	Before: 0.012 Ω/sq After: 0.081 Ω/sq
<b>Thermal Properties</b>			
Constant service temperature	-40–120 °C [-40–248 °F]	-40–120 °C [-40–248 °F]	-40–120 °C [-40–248 °F]
<b>Mechanical Properties</b>			
Adhesion (ABS)	5B	5B	5B
Pencil hardness (ABS)	HB, hard	HB, hard	HB, hard
<b>Magnetic Properties</b>			
Magnetic class	Ferromagnetic (magnetic)	Diamagnetic (non-magnetic)	Diamagnetic (non-magnetic)
Relative permeability	≥100	<1.0	<1.0

Values for conductive coatings in aerosol format will vary slightly.