

# Water Based Conductive Paint



## Protection Against EMI/RFI: Low VOC/Environmentally Safe

MG Chemicals WB series are water-based conductive paints that are designed for protection against EMI/RFI. These easy-to-use, 1-part systems are intended for use in building interiors where shielding against EMI/RFI is a necessity. Compared to the AR series, WB paints enjoy the benefits of being non-flammable, low VOC and having low odor.

### Features and Benefits

- 1-part system
- Ready to spray, no dilution required
- Low odor
- Excellent adhesion to drywall and most plastics
- Ships as non-DG by air
- Can be painted over with architectural paints

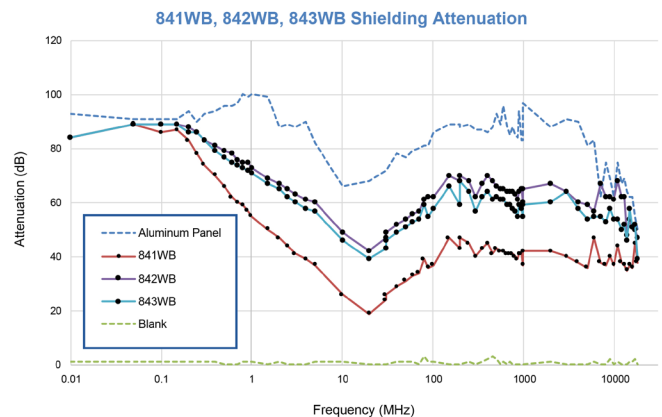
### Applications

- Plastic enclosures for PCBs
- EMI shielding for operating rooms and military facilities

**841WB** - Nickel conductive paint for broad spectrum shielding

**842WB** - Silver conductive paint for premium shielding performance

**843WB** - Silver-coated copper conductive paint which balances cost and EMI performance



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## UNCURED PROPERTIES

Conductive filler  
 Format  
 Color  
 Percent solids  
 Density @ 25 °C [77 °F]  
 Viscosity @ 25 °C [77 °F]  
 Calculated VOC  
 Theoretical coverage @ 2 µm  
 (based on 100% transfer efficiency)  
 Recoat time (Plastic)  
 Recoat time (Drywall)  
 Cure time @ 22 °C [71.6 °F]  
 Cure time @ 65 °C [149 °F]

### 841WB

Nickel  
 Liquid  
 Grey  
 60%  
 1.81 g/mL  
 143 cP  
 28 g/L  
 35 800 cm<sup>2</sup>/L  
 30 min  
 7 min  
 24 h  
 3 h

### 842WB

Silver  
 Liquid  
 Metallic silver  
 60%  
 1.5 g/mL  
 195 cP  
 37 g/L  
 32 655 cm<sup>2</sup>/L  
 20 min  
 5 min  
 24 h  
 3 h

### 843WB

Silver-coated copper  
 Liquid  
 Light metallic brown  
 42%  
 1.32 g/mL  
 660 cP  
 37 g/L  
 47 040 cm<sup>2</sup>/L  
 20 min  
 5 min  
 24 h  
 2.5 h

## CURED PROPERTIES

Resistivity  
 Surface resistance @ 50 µm  
 Salt fog resistance @ 35 °C [95 °F], 96 h  
 Constant service temperature  
 Adhesion (ABS/PC)  
 Pencil hardness  
 Magnetic class

0.027 Ω·cm  
 1.3 Ω/sq  
 Excellent  
 -40—120 °C  
 [-40—248 °F]  
 5B  
 HB, hard  
 Ferromagnetic

0.000075 Ω·cm  
 0.0020 Ω/sq  
 Excellent  
 -40—120 °C  
 [-40—248 °F]  
 5B  
 HB, hard  
 Diamagnetic

0.00053 Ω·cm  
 0.020 Ω/sq  
 Poor  
 -40—120 °C  
 [-40—248 °F]  
 5B  
 HB, hard  
 Diamagnetic

## AVAILABLE PACKAGING

15 mL (glass jar)  
 150 mL (metal can)  
 900 mL (metal can)  
 1 gal (metal can)

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 150 mL (metal can)  
 900 mL (metal can)  
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