

# Conductive Spray Paints



## Protection against EMI/RFI

MG Chemicals Conductive Spray Paints are acrylic-based conductive paints, packaged in aerosol cans, that are designed for protection against EMI/RFI across a broad frequency spectrum. These easy-to-use 1-part coatings cure quickly and are intended for use on commonly used plastics for PCB enclosures like ABS, Nylon and Polycarbonate. This convenient packaging option allows users to complete proof-of-concept or lower volume runs quickly and economically.

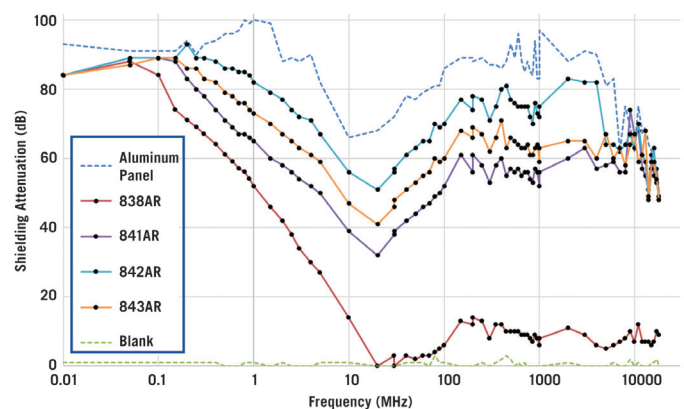
### Features & Benefits

- 1-part systems, easy to apply
- 4 options available depending on conductivity requirements
- Excellent adhesion to most plastics
- Does not contain toluene, xylene, or MEK
- Broad frequency range protection

### Applications

- Shielding plastic PCB enclosures
- Board-level shielding
- Conductive coating for electro-plating
- Shielding long-range communication devices and satellites

- 838AR-340G** • Carbon conductive paint for low frequency shielding and electrical grounding
- 841AR-340G** • Nickel conductive paint for broad spectrum shielding
- 842AR-140G** • Silver conductive paint for premium EMI protection
- 843AR-340G** • Silver-coated copper conductive paint which balances cost and EMI performance



# Conductive Spray Paints



	838AR-340G	841AR-340G	843AR-340G	842AR-140G
<b>UNCURED PROPERTIES</b>				
Conductive filler	Carbon	Nickel	Silver-coated copper	Silver
Format	Aerosol	Aerosol	Aerosol	Aerosol
Color	Black	Dark grey	Light metallic brown	Light grey
Percent solids	15%	57%	31%	61%
Density @ 25 °C [77 °F]	0.84 g/mL	1.34 g/mL	0.99 g/mL	1.38 g/mL
Viscosity @ 25 °C [77 °F]	46 cP	61 cP	87 cP	80 cP
Calculated VOC	587 g/L	470 g/L	404 g/L	361 g/L
Theoretical coverage @ 2 mil (based on 50% transfer efficiency)	1 500 cm <sup>2</sup>	2 500 cm <sup>2</sup>	3 100 cm <sup>2</sup>	680 cm <sup>2</sup>
Recoat time	3 min	3 min	3 min	3 min
Cure time @ 22 °C [71.6 °F]	24 h	24 h	24 h	24 h
Cure time @ 65 °C [149 °F]	30 min	30 min	30 min	30 min
<b>CURED PROPERTIES</b>				
Resistivity	0.69 Ω·cm	0.0076 Ω·cm	0.00022 Ω·cm	0.00012 Ω·cm
Surface resistance @ 50 μm	110 Ω/sq	0.60 Ω/sq	0.080 Ω/sq	0.050 Ω/sq
Salt fog resistance @ 35 °C [95 °F], 96 h	Excellent	Excellent	Poor	Excellent
Constant service temperature	-40–120 °C [-40–248 °F]	-40–120 °C [-40–248 °F]	-40–120 °C [-40–248 °F]	-40–120 °C [-40–248 °F]
Adhesion (ABS/PC)	5B	5B	5B	5B
Pencil hardness	H, hard	3H, hard	F, medium	3H, hard
Magnetic class	Diamagnetic	Ferromagnetic	Diamagnetic	Diamagnetic
<b>AVAILABLE PACKAGING</b>				
Net contents	340 g, 442 mL	340 g, 290 mL	140 g, 129 mL	340 g, 400 mL

