

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

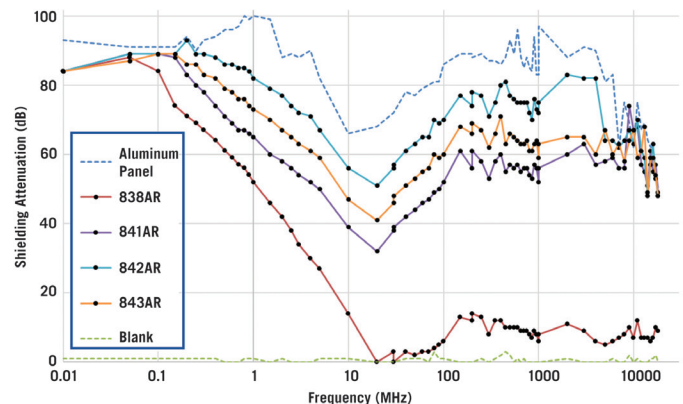
- Shielding plastic PCB enclosures
- Board-level shielding
- Conductive coating for electro-plating
- Shielding long-range communication devices and satellites

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



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UNCURED PROPERTIES

	838AR-340G	841AR-340G	843AR-340G	842AR-140G
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 100% transfer efficiency)	20 016 cm ²	44 785 cm ²	23 290 cm ²	46 000 cm ²
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

CURED PROPERTIES

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

AVAILABLE PACKAGING

Net contents	340 g, 442 mL	340 g, 290 mL	140 g, 129 mL	340 g, 400 mL
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