# 842AR Aerosol



## Super Shield™ Silver Conductive Spray Paint

842AR consists of a 1-part, solvent-based acrylic lacquer, pigmented with an extremely conductive silver flake. It is smooth, hard, and abrasion resistant. It has a quick dry time, with no heat cure necessary. It adheres strongly to most injection-molded plastics, such as ABS, PBT and PVA. It provides superior high frequency shielding. It also provides strong corrosion resistance, and is suitable for use in marine environments.

842AR provides a conductive coating for the interior of plastic electronic enclosures that suppresses EMI/RFI emissions. Also, its thin minimum layer height makes it suitable for board level applications.



#### **Features & Benefits**

- Provides superior EMI/RFI shielding over a broad frequency range
- Strong corrosion resistance
- Can be applied very thin, 0.2 mil minimum coating thickness
- Mild solvent system, safe on polystyrenes
- Does not contain toluene, xylene, or MEK
- Available in liquid format (see separate TDS)

#### **Available Packaging**

Cat. No.	Packaging	Net Vol.	Net Wt.
842AR-140G	Aerosol	132 mL	140 g

#### **Cured Properties**

Resistivity	1.2 x 10 <sup>-4</sup> Ω⋅cm
Surface Resistance @ 50 µm	$0.050 \Omega/sq$
Salt Fog Resistance @ 35 °C, 96 h	Excellent
Service Temperature Range	-40–120 °C

### **Usage Parameters**

Recoat Time	3	min
Cure Times	24 h @ 22	°C
	30 min @ 65	°C
Recommended Film Thickness	50	μm
Minimum Film Thickness	25	μm
Theoretical Coverage @ 2 mil	680	$cm^2$
(based on 50% transfer efficiency	<b>'</b> )	

### **Uncured Properties**

Viscosity @ 25 °C	80 cP
Density	1.38 g/mL
Percent Solids	38 %
Shelf Life	3 y
Calculated VOC	361 a/L

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#### **Safety Data Sheet**

Read the product SDS and Application Guide for more detailed instructions before using this product.

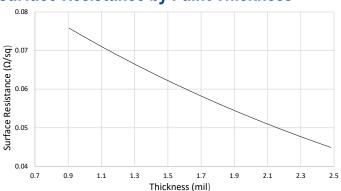
#### **Recommended Preparation**

Clean the substrate with Isopropyl Alcohol, MG #824, so the surface is free of oils, dust, and other residues.

#### **Application Instructions**

- 1. Shake the can vigorously.
- 2. Spray a test pattern to ensure good flow quality.
- 3. Tilt the board at 45° and spray a thin, even coat from a distance of 20–25 cm (8–10 in). Use spray-andrelease strokes with an even motion to avoid paint buildup in one spot. Start and end each stroke off the surface.
- **4.** Wait 3 min before applying another coat, to avoid trapping solvent.
- **5.** Rotate the board 90° and spray again to ensure good coverage.
- **6.** Apply additional coats until desired thickness is achieved (go to step 3).
- **7.** Let dry 3 min at room temperature before applying heat cure.
- **8.** After use, clear the nozzle by inverting the can and briefly spraying until clear propellant comes out.

#### **Surface Resistance by Paint Thickness**



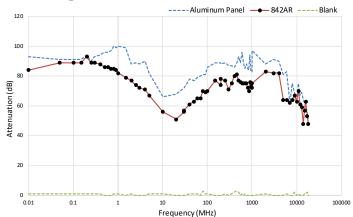
#### **Cure Instructions**

Allow to dry at room temperature for 24 hours, or after letting sit for 3 minutes, cure the paint in an oven for 30 minutes @ 65 °C.

#### **Storage and Handling**

Store between -5 and 40 °C in a dry area, away from sunlight (see SDS).

### **Shielding Attenuation**



Test performed with a two-coat thickness.

### **Disclaimer**

This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.