842AR Aerosol

Super Shield™
Silver Conductive Spray Paint

842AR is a conductive paint that consists of a 1-part, solvent-based acrylic lacquer, pigmented with an extremely conductive silver flake. It is smooth, hard, and abrasion resistant. It can be easily applied by brush or spray. 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 is designed to provide a conductive coating for the interior of plastic electronic enclosures that suppresses EMI/RFI emissions. It excels when the highest level of shielding is required. Also, its thin minimum layer height makes it suitable for board level applications.

Features and Benefits

- Provides superior EMI/RFI shielding over a broad frequency range
- Can be applied very thin, 0.2 mil minimum coating thickness
- Mild solvent system, safe on polystyrenes
- HAPS free—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

Contact Information

MG Chemicals, 1210 Corporate Drive
Burlington, Ontario, Canada L7L 5R6

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Cured Properties

Resistivity	1.2 x 10^{-4}	Ω·cm
Surface Resistance @50 µm	0.050	Ω/sq
Salt Fog Resistance @35 °C, 96 h	Excellent	
Service Temperature Range	-40–120	˚C

Usage Parameters

Recoat Time	10	min
Cure Times	24 h @ 22	˚C
	30 min @ 65	˚C
Recommended Film Thickness	50	µm
Minimum Film Thickness	25	µm
Theoretical Coverage @50 µm	≤680	cm^2

Uncured Properties

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

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Safety Data Sheet

Read the product SDS and Application Guide for more detailed instructions before using this product (downloadable at www.mgchemicals.com).

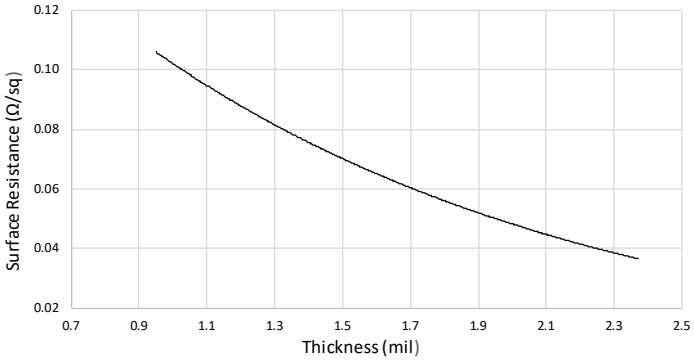
Recommended Preparation

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-and-release 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



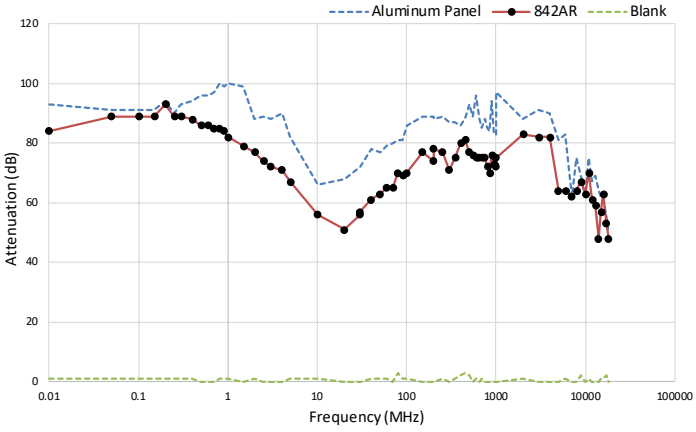
Cure Instructions

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.