844AR Liquid

ESD Safe Coating for Plastic

844AR is a 1-part, solvent-based, permanent electrostatic dissipative (ESD) coating. It adheres strongly to plastics, paints, metals, and many other surfaces. The cured coating is flexible, durable, and will not crack, chip or peel. The coating can be cured at room temperature or higher.

844AR is commonly used in electronic assembly lines to protect against electrostatic charge build-up on tools, production conveyor and bumpers, assembly trays, workstation surfaces, and enclosures.



Features & Benefits

- Dark grey, uniform and smooth ESD coating
- Quick-dry
- Strong adhesion with excellent flexibility
- Does not contain toluene, xylene or MEK
- Low VOC and HAP free

Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
844AR-900ML	Can	850 mL	799 g
844AR-3.78L	Can	3.60 L	3.38 kg

Contact Information

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Cured Properties

Surface Resistance @ 50 µm	2.0 x 10^8	Ω/sq
Service Temperature Range	-40–120	˚C

Usage Parameters

Recoat Time	5	min
Cure Times	24 h @ 22	˚C
	1 h @ 45	˚C
	30 min @ 65	˚C
	10 min @ 80	˚C
Recommended Film Thickness	50	µm
Minimum Film Thickness	40	µm
Theoretical Coverage @ 2 mil	26 800	cm^2/L

Uncured Properties

Viscosity @ 25 ˚C	8.6	cP
Density	0.94	g/mL
Percent Solids	17	%
Shelf Life	2	y
Calculated VOC	423	g/L

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Application Instructions

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.

Brush

Thinning is not required for most brush applications. Use a foam brush or MG #855 horse hair brush.

Manual Spray Guns

Use a standard fluid nozzle gun to spray the paint. The settings listed below are recommendations; however, performance will vary with different brands:

	LVMP	HVLP
Nozzle tip diameter	1.2–1.4 mm	1.2–1.4 mm
Inlet pressure	5–15 psi	5–15 psi
Air flow	10–15 SCFM	8.3 SCFM
Air cap	5–10 psi	5–10 psi

When using a pressure pot and agitator, keep the agitator at low mixing speed with air pressure of 20–50 psi. Use the lowest pressure necessary to keep the particles suspended.

Selective Coating

For higher volume applications, paint can be applied via selective coating equipment. Use a system with constant fluid recirculation to keep the particles from settling in the lines. A fluid nozzle ranging from 1.2 mm–1.4 mm diameter and 5–10 psi fluid pressure is recommended depending on nozzle size. Thin the paint to adjust the viscosity to the level appropriate for the valve being used.

Cure Instructions

Allow to dry at room temperature for 24 hours, or cure in an oven at one of these time/temperature options:

Temperature	45 °C	65 °C	80 °C
Time	1 h	30 min	10 min

Clean-up

Clean spray system and equipment with MEK or acetone, MG # 434.

Storage and Handling

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

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.