# 841WBU Liquid

## EMF Shielding Paint EU/UK

841WBU is a 1-part, water-based conductive paint, pigmented with highly conductive nickel flake. It is easy to use, with no let-down and no heat cure necessary. It can be applied by spray, brush or roller. It adheres strongly to most injection-molded plastics, such as ABS, PBT and PVA. It also bonds well to drywall and can be painted over with common architectural paints.

841WBU is designed to reduce EMI/RFI interferences in architectural, electric musical and electronics applications.




## Features & Benefits

- EU-compliant version of 841WB
  Provides effective EMI/RFI shielding over a broad range of frequencies
- Non-flammable and no noxious odors
- Ships as a non-DG by air
- Low VOC content

## Available Packaging

| Cat. No. | Packaging | Net Vol. | Net Wt. |
|---|---|---|---|
| 841WBU-55ML | Bottle | 55 mL | 99.4 g |
| 841WBU-850ML | Can | 850 mL | 1.53 kg |
| 841WBU-3.78L | Can | 3.60 L | 6.50 kg |

## Contact Information


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

Email: support@mgchemicals.com

Phone: North America: +(1)800-340-0772
International: +(1) 905-331-1396
Europe: +(44)1663 362888


## Cured Properties

| | | |
|---|---|---|
| Resistivity | 8.4 x $10^{-2}$ | Ω·cm |
| Surface Resistance @ 50 µm | 5.9 | Ω/sq |
| Service Temperature Range | -40–120 | ˚C |

## Usage Parameters

| | | |
|---|---|---|
| Recoat Time (plastic) | 6 | min |
| Recoat Time (drywall) | 5 | min |
| Cure Times | 24 h @ 22 | ˚C |
| | 3 h @ 65 | ˚C |
| | 1 h @ 80 | ˚C |
| Recommended Film Thickness | 65 | µm |
| Minimum Film Thickness | 50 | µm |
| Theoretical Coverage @ 2 mil (based on 100% transfer efficiency) | 31 600 | $cm^2$/L |

## Uncured Properties

| | | |
|---|---|---|
| Viscosity @ 25 ˚C | 120 | cP |
| Density | 1.8 | g/mL |
| Percent Solids | 58 | % |
| Calculated VOC | 174 | 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

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

Drywall—For new drywall, apply directly on top of the drywall primer, after the primer has properly cured. When applying on top of existing paint, first wash the wall with a solution of T.S.P. diluted with water at a 1:10 ratio, to ensure good adhesion.

## Paint Roller

This product may be applied with a standard paint roller. Thinning is not required.

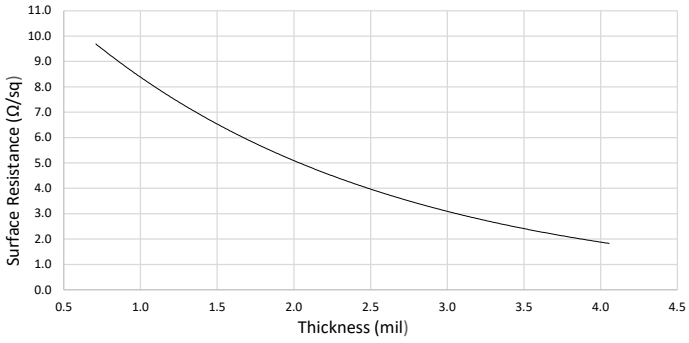
## Manual Spray Guns

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.

## Surface Resistance by Paint Thickness




## 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.

## Cure Instructions

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

| | | |
|---|---|---|
| **Temperature** | 65 °C | 80 °C |
| **Time** | 3 h | 1 h |

## Clean-up

Clean the spray system and equipment with tap water after use.

## Storage and Handling

Store between -10 and 27 ˚C in a dry area, away from sunlight (see SDS).

If exposed to freezing temperatures during storage or transport, keep product at room temperature for at least two days and ensure it is fully homogeneous prior to use.

## 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.