



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS LIMITED ECP-SWA001 ACRYLIC BASED SILVER CONDUCTIVE PAINT

Product overview

ECP-SWA001 is an electrically conductive paint comprising of a pure silver filler dispersed in a water based acrylic resin. It can be applied by spray or brush and adheres strongly to a wide range of polymer materials. The formulation is free from solvents that could have a detrimental effects on plastic substrates such as stress cracking. The cured coating is very tough/durable and resists scratching and abrasion.

The high conductivity of ECP-SWA001 means that a coating thickness as low as 10 microns can provide effective shielding. The cured coating has good cohesive strength and does not shed conductive particles.

Uncured properties

Colour	Silver
Form	Thixotropic viscous liquid
Density	2.2gcm ⁻³
Touch dry	15 minutes
Curing time (room temperature)	24 hours



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Cured film properties

Density	4.0 gcm ⁻³
Resistivity (approximately 15 microns)*	0.020 Ω/square
Maximum service temperature	85°C
Adhesion ASTM D-3359 – 97 (modified)	Pass
Attenuation – 100MHz to 10GHz (MIL-STD 285)	80 – 110dB (typically)
Abrasion resistance ASTM-D4060	TBD
Humidity resistance 168 hrs 85% @ 40°C	Pass

* Curing at elevated temperatures 40-65°C will allow the paint coating properties to develop more rapidly and provides lower final resistivity values.

Packaging

ECP-SWA001 is supplied in 100ml, 250ml and 500ml polypropylene jars.

Storage

It is recommended that when not in use that the material is stored in a cool dark, dry place. If kept properly sealed and in a suitable location then the material will remain usable for up to 9 months from date of manufacture.



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Handling

When using this material observe usual standards of industrial hygiene/practice. Avoid skin/eye contact and work in a well ventilated area. For more detailed information please refer to the MSDS (Material Safety Data Sheet)

Product notes

To the best of our knowledge the information contained in this data sheet is accurate and representative of the product, however, it is the responsibility of the user to determine the suitability, safety and legality of use in any application

We recommend that the end user performs an evaluation to determine the suitability of the product in their application

This product is not intended for direct use in food, medical and cosmetic applications

The values shown on this data sheet are typical and should not be used as the basis of a specification

Information supplied as to the suggested applications for this product should not be construed as constituting a license or concession to infringe any patent.



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Furthermore we cannot warrant that the sale or use of this product will not infringe any patent involving any application of this product either on its own or in combination with other materials or process