



Product Description

PSPI-700 is a water based silver nanoparticle conductive coating especially produced for EMI/RFI shielding and is designed to thermally cure at low temperatures. This ultra-low VOC sprayable coating is designed for plastic substrates. It provides a very thin film thickness (1 – 3 microns) with excellent shielding properties while being resistant to scratching and abrasion. It is especially useful where VOCs must be limited or when lower curing temperatures are desired.

Key Benefits

- Excellent flow properties and spray coverage
- Excellent adhesion to polycarbonate, ABS, and other plastic enclosures
- Spray coverage 3-4 times greater than alternative spray shielding products
- Minimal VOC's
- Easy cleanup with soap and water

Physical Properties

Silver Content (wt%)	20-30%
Density (wet)	1.05-1.3 g/ml (9.6-11.9 lb/gallon)
Viscosity @10s-1	125 cP
Viscosity @1000s-1	50 cP
pH	5.75
Volume Resistivity	20 $\mu\Omega$ -cm (7.9 m Ω /sq/mil)
Sheet Resistance	100 m Ω /sq at 2 micron (typical DFT)
Coverage	40 m ² /kg at 2 micron (typical DFT)
Shelf Life	3 months, >6 months with pH adjustment
Salt Spray Resistance	>48 hours (ASTM B117)

Typical Results

- 2 μ m cured film thickness can be deposited with a single spraying step, 0.2-0.8mm² nozzle delivery area, 20-30 psi
- 5-30s cure times (IR heating)
- 15 minutes at 75°C (convection heating)
- 3 minutes at 100°C (convection heating)
- 1 minute at 120°C (convection heating)

Please contact PChem Associates for detailed application information or assistance.