



Nanotech Elite EMI Armour Paint

Graphene Powered Silver-Coated Copper Polyurethane Paint for EMI/RFI Shielding and Heat Management

Product Overview

Nanotech Elite EMI Armour Paint is a two-part polyurethane conductive paint, based on Nanotech Premium Graphene Technology and silver-coated copper flakes. It can be sprayed, brushed, rolled or dip coated onto various surfaces, such as glass, plastic*, and metal. This highly conductive coating not only provides excellent external EMI/RFI protection for the equipment enclosed, but also prevents internal EMI/RFI leaking into the environment. The highly conductive shield paint can also be used to fix compromised existing shielding or conductive coatings.

This paint can be applied to the interiors of electrical components to efficiently attenuate electromagnetic interference (EMI) for equipment protection and data security. It can also be applied to the exteriors of equipment to provide corrosion resistance, abrasion protection and heat dissipation. The paint shows very good thermal conductivity, which is critical for the modern technology, in which heat sinks utilize conduction and convection for heat dissipation in order to avoid thermal shutdown.

*not recommended on polystyrene and polyethylene

**All numbers listed in this sheet have been confirmed by third party testing.

Item #: 905130

Specifications**	Clearcoat	Activator
Conductive filler	Graphene-metal composite	
Form	Liquid/slurry	
Solvent	Organic	
Color	Copper red/brown	
Viscosity	50-100 cP (25°C)	10-50 cP (25°C)
Calculated VOC	12.1g/100g	3.6 g/100g
Density	1.5 g/mL	1.7 g/mL
Solid content	61% (w/w)	60% (w/w)
Mix ratio	1:1 by volume	
Thinner	NE Elite EMI Armour Thinner	
Pot life	2 h at 25°C	
Respray time	25-30 min	
Cure time	20 h@25°C 20 min@50°C	
Electric conductivity	1000-2000 S/m (dry film)	
Thermal conductivity	2.26 ± 0.03 W/mK (dry film)	
Recommended coating thickness	50 µm (dry)	
EMI Shielding Effectiveness	>40 dB at 100 kHz – 10 MHz >60 dB at 1 GHz and 60-90 dB at 15 – 40 GHz	
Theoretical coverage	10 mL/square foot (50 µm thick recommended, not including paint lost to spray gun parts or containers)	

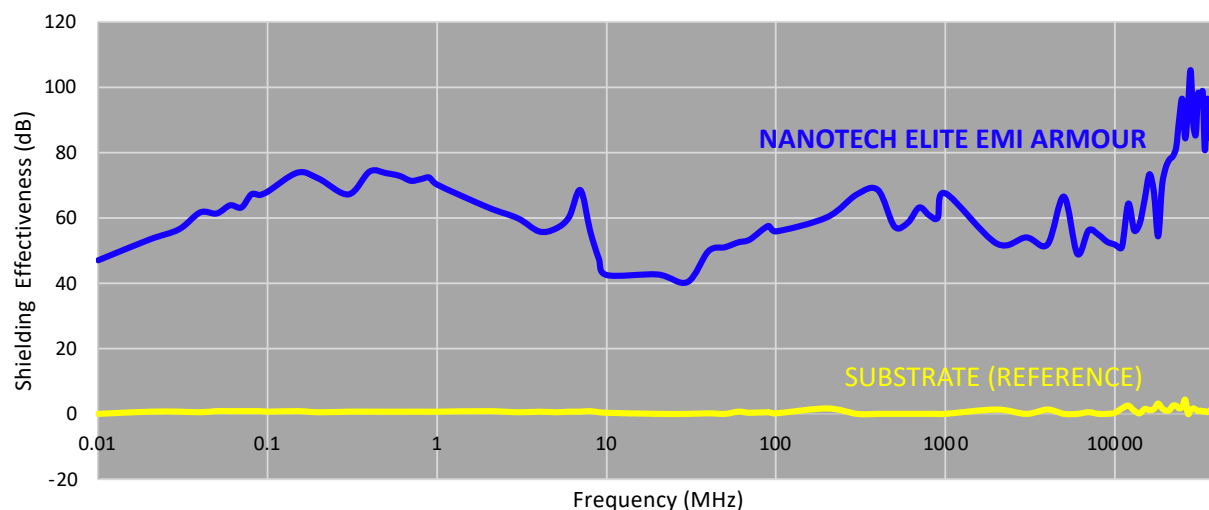
Product Features

- High electrical conductivity and thermal conductivity
- High EMI/RFI attenuation across a wide range of frequencies.
- Easy to spray or roll coat
- Fast drying
- RoHS compliant

Applications

- Air-spray, doctor blade, dip and roll coating
- Please read our air-spray instructions and SDS for more details

Shielding Effectiveness/Signal Attenuation Data* 50 µm thick coating



*Tested in compliance with IEEE Std. 299-2006 and MIL-STD-285 by a third party

Clean-up & Storage

- Clean spray system with acetone, ethanol or lacquer thinner.
- Store in a sealed container between 20-30°C, away from sunlight.

Disclaimer

The information claimed is believed to be accurate. Nanotech Energy Inc. holds no guarantee to the accuracy of data and no liability in connection with damages when using the product.

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