



## Metalon® Conductive Inks for Printed Electronics

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### Metalon® HPS-108AE1 Aerosol Ink – Aqueous dispersion

**HPS-108AE1** is an electrically conductive silver flake ink designed to produce conductive traces on low-temperature to high-temperature substrates such as paper, PET, glass, polyimide, and silicon. **HPS-108AE1** ink is specially formulated for aerosol printing and contains a polyurethane additive for improved adhesion to glass and other substrates as well as providing salt spray resistance.

THERMAL PROCESSING						
Substrate	Cure Temperature (°C)	Cure Time (minutes)	Sheet Resistance (Ω/sq) <sup>1</sup>	Weight Resistivity (Ω-g/m <sup>2</sup> )	Volume Resistivity <sup>2</sup> (μΩ-cm)	Sheet Resistivity <sup>3</sup> (Ω/sq/mil)
Melinex ST505	140	60	0.51	25	484	0.190
Polyimide	175	60	0.044	2.2	42	0.017
	200	60	0.026	1.3	25	0.010
	250	20	0.014	0.70	14	0.005
PULSEFORGE PROCESSING						
Melinex ST505	PulseForge <sup>4</sup>	NA	0.028	1.4	44	0.011

<sup>1</sup> At 0.05 kg/m<sup>2</sup> dry ink coverage (126 cm<sup>2</sup>/g wet ink), <sup>2</sup>At 50% porosity, <sup>3</sup> Based on 10 micron print with 50% porosity, <sup>4</sup> Pre-dry sample at 140C for 5 minutes

<b>Physical Properties</b>	<p><b>General Description</b> ..... Water-based Ag flake ink</p> <p><b>Viscosity (typical values)</b>..... 150 cP (Brookfield #2 spindle @ 30rpm)</p> <p><b>Specific Gravity</b> ..... 2.2</p> <p><b>Flash Point</b>..... Non-flammable</p> <p><b>Particle Size</b>..... D50 0.4 micron D90 0.7 micron</p> <p><b>Ag Content</b>..... 60 wt%</p>
<b>Shipping and Packaging</b>	Standard sample order is 100g or multiples of 100g. Inquire directly for packaging of larger quantities.

**www.novacentrix.com**  
**Contact us today to learn more.**  
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