# Metalon® Conductive Inks for Printed Electronics

**www.novacentrix.com**

## 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)[1]** | **Weight Resistivity (Ω-g/m²)** | **Volume Resistivity[2] (μΩ-cm)** | **Sheet Resistivity[3] (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[4] | NA | 28 | 1.4 | 44 | 0.011 |

[1] At 0.05 kg/m2 dry ink coverage (126 $cm^2$/g wet ink), [2]At 50% porosity, [3] Based on 10 micron print with 50% porosity, [4] Pre-dry sample at 140C for 5 minutes

| | |
|---|---|
| **Physical Properties** | **General Description** ..... Water-based Ag flake ink<br>**Viscosity (typical values)**..... 150 cP (Brookfield #2 spindle @ 30rpm)<br>**Specific Gravity**..... 2.2<br>**Flash Point**..... Non-flammable<br>**Particle Size**..... D50 0.4 micron<br>D90 0.7 micron<br>**Ag Content**..... 60 wt% |
| **Shipping and Packaging** | 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.**
Stan Farnsworth: 512 491 9500 x210
stan.farnsworth@novacentrix.com


Copyright September 2016September 2016 NovaCentrix