

## Materials for Printed Electronics

ANI Catalog #	Description
<p><b>Cu-IJ70-XX</b> <b>(Ink Jet)</b></p> <p><b>Aerosol Jet</b> <b>version available</b></p>	<p>Cu-IJ70 is a copper nanoparticle ink suitable for printing highly conductive lines and patterns for applications in the printable electronics and PCB industry. Optimized for piezoelectric inkjet heads. Cu-IJ70 can be printed and sintered to form conductive patterns on flexible substrate materials such as polyimide, liquid crystal polymer (LCP), and certain coated papers. XX = the percent of Cu loading. Cu-IJ70-50 is 50% Cu loading.</p>
<p><b>CuNi-IJ5050 and</b> <b>CuNi-IJ5545</b></p> <p><b>Aerosol Jet</b> <b>version available</b></p>	<p>ANI's CuNi-IJ5545 is a CuNi Constantan alloy (55/45) ink suitable printing resistors, strain gauges, thermopiles and thermocouple sensors. CuNi-IJ can be printed and cured to form conductive patterns on substrates such as silicon, ceramics and Kapton. These inks contain copper-nickel alloy nanoparticles ranging in size from 20-40nm but larger size ranges (up to 200nm) are also available. These inks are solvent-based and can be printed by inkjet printing and aerosol jet printing techniques. Printed copper-nickel alloy ink on plastic substrates can be photosintered in atmosphere to produce conductive copper-nickel alloy traces.</p>
<p><b>Cu-PS70</b></p>	<p>Cu-PS70 is a copper nanoparticle paste suitable for patterning highly conductive lines for applications in the printable electronics and PCB industry. Cu-PS70 provides excellent electrical properties on silicon, and polyimide substrates. Cu-PS70 is an excellent replacement for silver-based conductors. 60-80% Cu loading.</p>
<p><b>Cu-PM530</b></p>	<p>Cu-PM530 micro copper paste is formulated for screen printing techniques. The Cu-PM530 paste is designed for flexible substrates commonly used in printed electronics. Examples substrates include PET, Paper, Polycarbonate, ABS and FR4 composite materials. The micro copper paste provides excellent electrical properties and is an excellent replacement for silver-based conductors.</p>
<p><b>Ni-IJ70</b> <b>Aerosol Jet</b> <b>version available</b></p>	<p>Ni-IJ70 is a nickel nanoparticle ink suitable for printing highly conductive lines and patterns for applications in the printed electronics and solar industry. Ni-IJ70 can be printed and sintered to form conductive patterns on substrates such as silicon and polyimide. Inkjet and aerosolized jet versions available. 30%- 60% Ni loading.</p>
<p><b>Ag-PM100</b></p>	<p>Ag-PM100 is a silver paste suitable for contact printing highly conductive lines and patterns for applications in the printed electronics industry. Ag-PM100 paste can be thermally sintered at low temperatures on glass, PET and polyimide substrates.</p>
<p><b>In-OC70 NEW</b> <b>InSn-OC70 NEW</b></p>	<p>Indium and indium-tin-alloy ink. Early prototypes are available, formulated for Aerosol Jet but can be optimized for dispensing and screen-printing platforms.</p>
<p><b>PbSn and BiPbSn</b> <b>In Development</b></p>	<p>Lead-tin and Lead-bismuth-tin inks are in development.</p>
<p><b>Nb, Mo, Zr NEW</b></p>	<p>Niobium, Molybdenum and Zirconium ink and paste materials. Early prototypes are available, formulated for Aerosol Jet but can be formulated for dispensing and screen-printing platforms.</p>
<p><b>XX-YY</b></p>	<p><b>Please contact us for your custom ink formulation needs.</b></p>