



## Metalon® Conductive Inks for Printed Electronics

[www.novacentrix.com](http://www.novacentrix.com)

### Metalon® JS-B40G

#### Nanosilver Ink – Aqueous dispersion for Dimatix Printheads

**JS-B40G** is an electrically conductive ink designed to produce circuits on non-porous substrates including ITO-coated substrates, PET, polyimide, and glass. JS-B40G ink is specially formulated for compatibility and stability with Dimatix printheads. A printing waveform for Dimatix DMP heads is available.

<b>Performance Properties</b>	<p><b>Metalon JS-B40G</b> when printed and cured, produces conductive traces that can attain weight resistivity &lt;2x bulk Ag.</p> <p><b>Typical Performance</b></p> <p><u>Thermal processing (min 180°C required)</u></p> <p>Glass (10min@250C) – 1.7x bulk Ag (based on weight resistivity)          Polyimide (10min@250C) – 4.4x bulk Ag (based on weight resistivity)          Polyimide (20min@250C) – 3.2x bulk Ag (based on weight resistivity)</p> <p style="text-align: center;"><b>&gt;4H, water / IPA / acetone resistant</b></p> <p><u>PulseForge processing</u></p> <p>Polyester – &lt;500 milli-ohm/square          Polycarbonate – &lt;500 milli-ohm/square</p>																		
<b>Physical Properties</b>	<p><b>General Description</b> ..... Water-based Ag ink  <b>Flash Point</b> ..... Non-flammable</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">JS-B40G</th> <th style="width: 25%; text-align: center;">Units</th> </tr> </thead> <tbody> <tr> <td>Ag content</td> <td style="text-align: center;">40</td> <td style="text-align: center;">wt%</td> </tr> <tr> <td>Viscosity</td> <td style="text-align: center;">8-12</td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Surface tension</td> <td style="text-align: center;">28-32</td> <td style="text-align: center;">dyne/cm</td> </tr> <tr> <td>z-avg particle size<sup>2</sup></td> <td style="text-align: center;">60-80</td> <td style="text-align: center;">nm</td> </tr> <tr> <td>Specific gravity</td> <td style="text-align: center;">1.56</td> <td style="text-align: center;">–</td> </tr> </tbody> </table> <p><small><sup>2</sup> Malvern dynamic light scattering</small></p>		JS-B40G	Units	Ag content	40	wt%	Viscosity	8-12	cP	Surface tension	28-32	dyne/cm	z-avg particle size <sup>2</sup>	60-80	nm	Specific gravity	1.56	–
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<b>Shipping and Packaging</b>	Standard sample order is 50 mL or multiples of 50 mL. Bulk packaging is also available.																		

**[www.novacentrix.com](http://www.novacentrix.com)**  
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