



High-Performance Materials

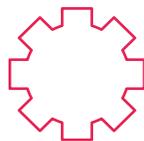


XTPL® Nanoinks Benefits

Explore XTPL's metallic nanoinks benefits – enabling swift development cycles and ensuring optimal resolution and conductivity. Our innovation propels your project forward in any field.



Up to 50% silver
bulk conductivity



High content of
conductive component



Superior
stability

High-Performance Materials



Ag Nanoink IJ36
Conductive Silver Ink

- Stable printing for >1 month without clogging
- Exceeds 40% bulk Ag conductivity
- High aspect ratios with single-pass printing



Ag Nanoink CL34
Conductive Silver Ink

- Up to 50% bulk silver conductivity
- Ideal for printing on foils for flexible electronics
- Suitable for low aspect ratio profile applications



Ag Nanoink CL60
Conductive Silver Ink

- High-viscosity enables ultra-fine, high-aspect ratio printing
- Facilitates easy dispensing and effortless blading
- Ensures smooth deposits and donor surfaces



Ag Nanopaste CL85
Conductive Silver Paste

- High-viscosity enables ultra-fine, high-aspect ratio printing
- Exceptional non-clogging properties allows >1 month, 2.5 μm nozzle lifetime
- Dispenses through 1.5 μm nozzles for uniform thin lines
- Suitable for printing on vertical surfaces

Typical properties

Properties	Ag Nanoink IJ36	Ag Nanoink CL34	Ag Nanoink CL60	Ag Nanoink CL85
Silver content (wt. %)	34 \pm 2	30 \pm 2	54 - 63	82 \pm 2
Average nanoparticles size [nm] (TEM)	35 - 50	35 - 50	35 - 50	35 - 50
Shape of nanoparticles	Spherical	Spherical	Spherical	Spherical
Electrical resistivity [$\mu\Omega \cdot \text{cm}$]*	3.95	3.25	5.11	4.20
Viscosity (25°C, shear rate = 0.2 s ⁻¹) [cP]	26 - 30	200 - 400	30 000 - 50 000	> 1 000 000
Solvent(s)	Glycol ether	Glycol(s)	Glycol(s)	Glycol(s)
Compatible printing method	• Inkjet printing	• Aerosol printing (pneumatic atomizers) • LIFT • XTPL® Ultra-Precise Dispensing	• LIFT • XTPL® Ultra-Precise Dispensing	• LIFT • XTPL® Ultra-Precise Dispensing

*For recommended sintering conditions

Contact our team

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