



## PChem® Conductive Inks for Printed Electronics

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

### PFI-500 Conductive Flexo Ink

#### Product Description

PFI-500 is an aqueous flexo-printable conductive ink containing proprietary silver nanoparticles. PFI-500 has been specifically formulated for Flexiproof and other proofing applications, good electrical conductivity, fast curing, and improved leveling.

#### Key Benefits

- Fast curing at low temperatures suitable for reel to reel processing
- Suitable for Flexiproof and other proofing applications
- Good electrical conductivity and thin cured film thicknesses for material cost savings
- Good flexibility and crease resistance
- Compatible with polyester, polycarbonate, polyurethane, polyimide, and label paper
- Can be processed with NovaCentrix's PulseForge® tools
- Minimal VOCs
- Easy cleanup with soap and water

#### Physical Properties

Silver Content (wt. %)	50 (± 2)
Density (wet)	1.88 g / mL (15.8 lb / gal)
Viscosity @10s <sup>-1</sup>	400 - 800 cP
Viscosity @1000s <sup>-1</sup>	200 - 400 cP
pH	5.88 to 5.94
Volume Resistivity	7 - 9 μΩcm (2.8 - 3.9 mΩ / sq at 1 mil)
Printed Sheet Resistance	100 - 600 mΩ / sq (anilox- and cure-condition-dependent)
Coverage	120 - 700 m <sup>2</sup> / kg (anilox-dependent)
Shelf Life	In a refrigerated environment of 2 - 9°C, > 8 months (unopened container)

**Refrigeration is recommended**

#### Typical Results

- < 2 s cure times with IR heating
- < 5 s cure times with conductive heating
- 10 - 60 s cure times with 140°C convection (velocity dependent)
- 80°C cures are possible with cure times > 3 minutes

Please contact [inktechnicalsupport@novacentrix.com](mailto:inktechnicalsupport@novacentrix.com) to learn more, for detailed application information, or for assistance. Ink can be ordered at [store.novacentrix.com](http://store.novacentrix.com)