

PChem® Conductive Inks for Printed Electronics

www.novacentrix.com

PFI-600® Conductive Flexo Ink

Product Description

PFI-600 is an aqueous flexo-printable conductive ink containing PChem's proprietary silver nanoparticles. PFI-600 has been specifically formulated for high conductivity, fast curing, and improved leveling at lower printing speeds.

Key Benefits

- Fast curing at low temperatures ideal for reel to reel processing on PET film
- Suitable for lower printing speeds of < 150 FPM
- Improved leveling on film substrates at minimum press operational speeds
- Excellent conductivity and thin cured film thicknesses for material cost savings
- Good flexibility and crease resistance
- Good adhesion to print-treated polyester films
- Minimal VOCs
- Easy cleanup with soap and water

Physical Properties

Silver Content (wt. %) 60 (± 2)

Density (wet) 2.25 g / mL (18.8 lb / gal)

Viscosity @10s⁻¹ 500 - 900 cP Viscosity @1000s⁻¹ 200 - 400 cP pH 5.92 ± 0.02

Volume Resistivity $5 - 7 \mu\Omega \text{cm} (2.0 - 2.8 \text{ m}\Omega / \text{sq at 1 mil})$ Printed Sheet Resistance $50 - 350 \text{ m}\Omega / \text{sq (anilox-dependent)}$ Coverage $100 - 600 \text{ m}^2 / \text{kg (anilox-dependent)}$

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 inkstechnical support@novacentrix.com to learn more, for detailed application information, or for assistance. Ink can be ordered at store.novacentrix.com