



## Product Description

PFI-722 is an aqueous flexo-printable conductor containing PChem's proprietary silver nanoparticles. PFI-722 has been specifically formulated for high conductivity, fast curing, fine feature printing, and smooth lay-downs.

## Key Benefits

- Fast curing at low temperatures suitable for reel to reel processing on PET film
- Print speeds of >400FPM have been achieved with in-line IR ovens
- Excellent conductivity and thin cured film thicknesses for material cost savings
- Good printability, with features less than 25µm possible
- Good flexibility and crease resistance
- Good adhesion to print treated polyester films
- Minimal VOC's
- Easy cleanup with soap and water

## Physical Properties

Silver Content (wt%)	60% (±2%)
Density (wet)	2.2 g/ml (18.4 lb/gallon)
Viscosity @10s-1	550 cP
Viscosity @1000s-1	130 cP
pH	5.85
Volume Resistivity	5-7 µΩ-cm (2.0-2.8 mΩ/sq/mil)
Printed Sheet Resistance	50-350 mΩ/sq (anilox dependant)
Coverage	100-600 m <sup>2</sup> /kg (anilox dependant)
Shelf Life	With storage in a refrigerated environment of 35-48°F, 6-8 months

## Typical Results

- 25 µm wide printed lines (contact PChem for details)
- 200 nm thick cured films with 1.5 BCM anilox, 1µm with 8 BCM
- <2s cure times with IR heating
- <5s cure times with conductive heating
- 10-60s cure times with 140°C convection (velocity dependent)
- 80°C cures are possible with cure times >3 minutes .

### **Storage in a refrigerated environment is recommended**

Please contact PChem Associates for detailed application information or assistance.