

SOLVENT-FREE PIEZORESISTIVE INK

Nanopaint's SFInkPR03NP® is a screen printable solvent-free and carbon-based piezoresistive ink. It is a low-temperature curable ink that is flexible on an appropriate substrate. The ink can be used for pressure sensors for printed electronic applications.

INK FEATURES

- ✓ Carbon-based
- ✓ Temperature resistance
- ✓ Low temperature curable
- ✓ Easy screen printable
- ✓ Of easy cleaning
- ✓ Piezoresistive – Directly printed onto conductive layer (without spacer)
- ✓ Flexible
- ✓ Stretchable on an appropriate substrate
- ✓ Not harmful for health
- ✓ Applied to a variety of materials

INK PROPERTIES

Apparency	Dark grey/Black
Cure processing	Thermal cure
Solid content (%)	35%
Viscosity	15 000 – 20 000 cP
Piezoresistive response:	0-1000N
Max. particle diameter (µm)	< 15

HANDLING GUIDELINES

Processing	Stir vigorously with a spatula
Printing equipment	Screen printer, doctor blade printing
Mesh count (Th/cm)	61-80
Squeegee hardness	60-75 Shores
Cure conditions	130°C for 5 minutes in a regular or ventilated oven
Clean-up solvent	Nanopaint's cleaning solvent Clear100NP
Substrates	PET, PEN, MELINEX, Milar (...)
Storage	Should be kept well sealed in its container, away from direct sunlight and stored at a controlled temperature between 15 - 35°C
Shelf-life	Ink in an unopened container has a recommended shelf life of 3 months from the date of delivery

