

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

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|---------------------------|---|
| ✓ Carbon-based | ✓ Piezoresistive |
| ✓ Temperature resistance | ✓ Flexible |
| ✓ Low temperature curable | ✓ Stretchable on an appropriate substrate |
| ✓ Easy screen printable | ✓ Not harmful for health |
| ✓ Of easy cleaning | ✓ 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	100 °C for 10 minutes in a regular or ventilated oven



Clean-up solvent	Nanopaint's cleaning solvent Clear100NP
Substrates	Textile (Cotton 100%, cotton mixed with synthetic fibres, elastic substrates)
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

