PIEZORESISTIVE INK

Nanopaint's InkPR02NP® shows a strong variation of the electrical resistance upon mechanical deformation, allowing the implementation of force and stress sensors on different types of substrates, either rigid or flexible. This ink is easily solubilized in various solvents and requires no post-treatment process to active electroactive properties.

INK FEATURES

- ✓ Carbon-based
- ✓ Face-to-face printing
- ✓ Strong variation of the electrical resistance
- ✓ Piezoresistive
- ✓ Flexible
- ✓ Stretchable

INK PROPERTIES

Apparency	Black
Physical form	Solution
Cure processing	Thermal cure
Solid content (%)	35%
Viscosity	5 000 – 10 000 cP
Max. particle diameter (µm)	<10

HANDLING GUIDELINES

Processing	Vigorously stir with a spatula
Printing equipment	Screen printer, doctor blade printing, stencil printing
Mesh count, warp (n/cm)	55-63
Stencil	40 microns
Squeegee hardness	60-75 Shores
Cure conditions	80-120˚C for 10 min in a regular or ventilated oven
Clean-up solvent	Nanopaint's cleaning solvent **Clear100NP**
Substrates	Glass, PET, PEN, MELINEX, Milar (…)
Storage	Should be kept well sealed in its container, away from direct sunlight and stored at a controlled temperature between 10 - 20ºC
Shelf-life	Ink in an unopened container has a recommended shelf life of 3 months from the date of delivery

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