

SUPERPARAMAGNETIC INK

Nanopaint's SPMInkNP® is a screen printable superparamagnetic ink, easily solubilized in various solvents, with distinctive properties such as high superparamagnetic behaviour and magnetic response. It is a low-cost solution for the production and implementation of magnetic sensors on rigid or flexible substrates.

INK FEATURES

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|--------------------------------|-----------------------|
| ✓ High dispersion and isotropy | ✓ Superparamagnetic |
| ✓ High magnetic response | ✓ Flexible |
| ✓ Custom formulation suitable | ✓ Easy processability |
| ✓ Easy screen printable | ✓ Of easy cleaning |

INK PROPERTIES

Apparency	Dark brown/Black
Cure processing	Thermal cure
Solid content (%)	35%
Viscosity	8 000 – 12 000 cP

MAGNETIC PROPERTIES

Magnetization saturation (emu.g ⁻¹)	2
Remanence (emu.g ⁻¹)	0
Coercive Field (Oe)	0

HANDLING PROPERTIES

Processing	Vigorously stir with a spatula
Printing equipment	Screen printer, doctor blade printing
Mesh count, warp (n/cm)	55-63



Squeegee hardness	60-75 Shores
Cure conditions	60°C for 10 minutes in a regular or ventilated oven
Clean-up solvent	Nanopaint's cleaning solvent Clear100NP
Substrates	Glass, PET, PC or paper
Storage	Should be kept well sealed in its container, away from direct sunlight and stored at a controlled temperature between 10 - 20°C
Shelf-life	Ink in an unopened container has a recommended shelf life of 3 months from the date of delivery