

Nanopaint Superparamagnetic Ink

Nanopaint superparamagnetic inks are produced through a high quality process in order to exhibit a unique set of inherent magnetic properties. It can be applied on various substrates, such as glass, PET, PC or paper, by various techniques:

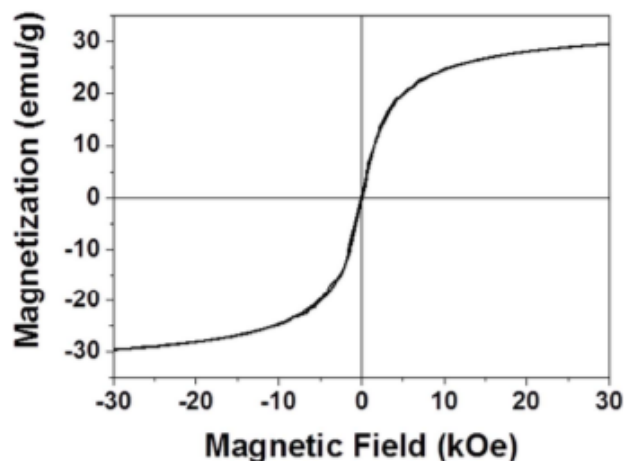
- Screen printing
- Doctor blade printing
- Stencil printing
- Spray printing

Nanopaint superparamagnetic ink is easily solubilized in various solvents, showing distinctive properties:

- High superparamagnetic behaviour and magnetic response.
- High dispersion and high isotropy.
- Allows the production of flexible magnetic sensors.
- Easy processability allowing different sensor configurations.
- Custom formulation suitable for each type of printing technique.

With a low-cost solution, it is possible to produce and implement magnetic sensors, on rigid or flexible substrates.

Magnetization vs. magnetic field for a 50 µm thickness solvent-casting film.



NOTE:
 Mix the ink before use.
 Do not use magnetic stirring!

Technical Properties

Melting Temp. range (°C)	108 - 150
Density (g/cm ³)	0.85 – 1.9

Magnetic properties

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

Screen Printing properties

Mesh opening (µm)	75
Open area (%)	35
Mesh count, warp (n/cm)	80
Wire diameter, warp (µm)	48
Tension on mesh (N)	17-20