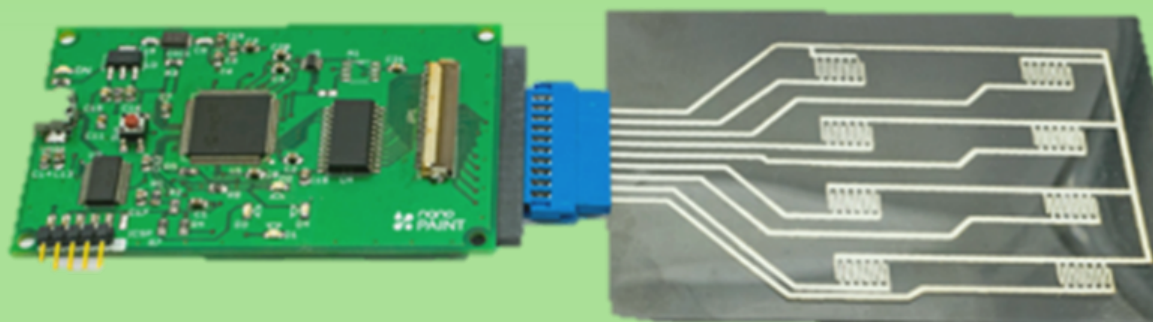


## Piezo resistive ink



## MAGRON Piezoresistive ink

**InkPR02NP** is easily solubilized in various solvents, showing unique properties. There is no need for any specific or expensive post-treatment process to activate their electroactive proprieties. It can be processed on various substrates.

### 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	Stir vigorously with a spatula
Printing equipment	Screen printer, doctor blade printing, Stencil printing
Mesh count, (Th/cm)	55 – 63
Stencil	40 microns
Squeegee hardness	60-75 Shores
Cure conditions	60°C for 10 minutes in a regular or ventilated oven
Clean-up solvent	cleaning solvent
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 - 20°C
Shelf-life	Ink in an unopened container has a recommended shelf life of 3 months from the date of delivery

## MAGRON Solvent free Piezoresistive ink

**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
- ✓ 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:	0-1,000N
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	cleaning solvent
Substrates	Textile (Cotton 100%, cotton mixed with synthetic fibers, 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

## MAGRON PR Ink

Piezoresistive Inks for TEXTILES E-TeXPR01NP

**E-TeXPR01NP®** is a screen printable carbon-based piezoresistive ink. It is a low-temperature curable ink with high elasticity and flexibility, ideal for textile substrates. The ink can be used for pressure sensors for printed electronic applications.

### INK FEATURES

- |                                |  |
|--------------------------------|--|
| ✓ Carbon-based                 | ✓ Piezoresistive                       |
| ✓ Temperature resistance       | ✓ Excellent elasticity and flexibility |
| ✓ Low temperature curable      | ✓ Soft and velvety touch               |
| ✓ Easy screen printable        | ✓ Not harmful for health               |
| ✓ Of easy cleaning             | ✓ Direct textile printing              |
| ✓ High stability in the screen |  |

### INK PROPERTIES

Apparency	Dark grey/Black
Cure processing	Thermal cure
Solid content (%)	45%
Viscosity	8,000 - 12,000 cP
Max. particle diameter (µm)	<15

### HANDLING GUIDELINES

Processing	Stir vigorously with a spatula
Printing equipment	Screen printer, doctor blade printing
Mesh count, (Th/cm)	55 - 77
Squeegee hardness	60-75 Shores
Cure conditions	130°C for 5 minutes in a regular or ventilated oven
Clean-up solvent	cleaning solvent
Substrates	Textile (Cotton 100%, cotton mixed with synthetic fibers, 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