

TECHNICAL DATA SHEET:

Product Description

NOVI nAgSC ink is design to produce a conductive paths and areas on different substrates like glass, silicon, ceramic or flexible foils. The ink is suitable for spray coating technology and does not need any additional protective layer.

It is possible to adjust the properties of the ink to the customer's needs.

Product benefits

- ✓ *No need to use cleanroom*
- ✓ *High flexibility of layers*
- ✓ *High conductive transparent layer*

Processing:

materials tested as possible substrates:

Ceramic, Aluminum, Copper, Glass, Kapton foil,

designed for technologies:

spray coating

important processing parameters:

- instrumentation: automatic or manual spray guns
- technical gases: air or nitrogen
- sintering in 300 °C for 30 min

Composition:

- Functional phase: silver nanoparticles
- Washing solvent: acetone, toluene
- Organic vehicle and solvent

Important joint parameters:

- **Sheet Resistance:** $\sim 15-30 \Omega/sq.$
- **Thickness of the layer after drying:** $0,3-4 \mu m$
- **Optical transmission ($\lambda=550 \text{ nm}$):** $50-60 \%$
- **Viscosity (shear rate 200 s^{-1}):** $1 - 6 \text{ mPas}$

Storage and shelf life:

Tightly sealed containers should be stored in a dry room, at room temperature, away from sources of fire. Shelf life for pastes in unopened containers is 6 months from the date of production. Sedimentation symptoms may appear; Before use please stir the ink thoroughly and despair is ultrasonic homogenization for 15s.