NANOTECHNOLOGIES

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# TG CONDUCTIVE PAINTS-INK

## Description

It is a high performance electrically as well as thermally conductive water-based ink formulated with the in-house proprietary Graphene Nanoplatelets for printing applications. It is fast drying, eco-friendly and chemically stable ink with concentrated graphene content, making them highly conductive. The adhesion of the ink is excellent to a variety of substrates except plastic. This ink is best suitable for Printed flexible electronics on a wide spectrum of substrates like, paper, wood, rubber, textile and glass. The TG paint-inks are water-resistance up to 20 washes, which can be improved to last longer using waterproof and abrasion-resistant coating. The use of ink will leave marks on substrates like fabric and leather due to the high concentration of carbon.

## Properties

Colour	Dark grey / Black
Sheet resistivity (50 µm Thickness)	< 25 Ohm/square/mill
% of Conductive Material	>25
Drying time	12 – 15 min (min @ 75 C)
Thinner	Water

## Storage and Shelf Life

Container should be tightly sealed and stored in a clean and stable environment at room temperature. Avoid high heat or freezing. Shelf life of material in unopened containers is three months from the date of manufacturing. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

## Mixing and Dilution

Shake well before use. If necessary, add thinner while mixing. .

#### Substrate

Leather and Textile

### Drying

Coated parts should be dried at 75°C for 12-15 minutes immediately after printing.

### Clean-up Solvent

Water.

### Applications

- PCB Printing
- EMI Shielding
- Thermally conductive Coatings
- Smart Textiles
- Electronic Sensors
- Interactive Spaces