

Technical Data Sheet



THICK FILM MATERIALS

Product Type: Polymer Thick Film

Product Name: LTR4905

5 ohm Graphene Ink

Description

LTR4905 is a screen printable, graphene-enabled conductive ink for low temperature applications. This graphene-enabled ink, when properly cured, has good adhesion to most untreated and treated flexible plastic films such as polyester.

Key Benefits

- Good adhesion to most flexible plastic films
- Fast curing
- Compatible with Heraeus low temperature Ag conductor

Recommended Processing Guidelines

Printing:

325 stainless steel mesh or nylon screen
0.5 mil emulsion thickness

Cleaning:

Clean uncured resin with Acetone or similar solvent.

Curing:

120 °C for 5 minutes
110 °C for 10 minutes
90 °C for 15 minutes

Cured Thickness:

6 – 8 microns

Recommended Substrates:

Untreated PET
Treated PET
Flexible plastic films

Warranty

Material guaranteed to meet specifications for 6 months from date of shipment

Handling & Precautions:

Use in a well-ventilated area.
Avoid contact with skin.
Wash with soap and water.

Storage

Store in a dry location at 5 – 25 °C

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

SPECIAL NOTE:

Some of these materials may show resistance shifts due to thermal storage. Stability baking has been shown to minimize this behavior.

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Typical Paste Properties

Resistivity:

≤ 5 ohms/square/mil when cured at 120 °C for 5 minutes

Adhesion:

Tape Test Method
Good 5B Adhesion

Viscosity:

100 – 130 Kcps Brookfield HBT
SC4 -14 spindle and 6R utility cup @ 10 rpm,
25 °C

Solids:

40 ± 1.0%

Mixing:

Material should be thoroughly mixed prior to use.

Non-Volatile

80.0 ± 2.0 %
3 hours at 135 °C

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