

DuPont 9169

SILVER CONDUCTOR

Technical Data Sheet

Product Description

DuPont 9169 silver conductor is a polymer based conductor used for Indium Tin Oxide (ITO) and other transparent conductive oxide substrates

Product Benefits

- Excellent Conductivity
- Fine line print capability

Processing

Screen Printing Equipment

May be printed using reel-to-reel, semi-automatic, or manual printers

Screen Types

Stainless steel or polyester

Typical Cure Conditions

Depending on the temperature tolerance of the substrate, DuPont 9169 may be cured at temperatures between 120°C and 170°C. Cure times can vary from 5 minutes to 30 minutes. Longer cure times and higher cure temperatures improve adhesion, Resistivity and abrasion resistance

Typical Circuit Line Thickness Printed with 325-mesh stainless steel screen

10-12 microns

Clean up Solvent

Ethylene glycol diacetate

Table 1
Typical Physical Properties
(on 5-mil Polyester Film)

| Test | Properties |
|---|-----------------|
| Resistivity (mΩ/sq/mil) (@ 25 μm thickness) | ≤ 18 |
| Abrasion Resistance, Pencil Hardness (H) (ASTM D3363-74) | 2 |
| Solderability | Not Recommended |

Table 2
Composition Properties

| | |
|--|-------------|
| Viscosity (Pa.s) (Brookfield RVT, 10rpm #14 spindle &UC, 25°C) | 30 - 55 |
| Solids (750°C)(%) | 78.0 - 80.0 |
| Coverage (cm ² /gm) (@25μm cured thickness) | 120 - 150 |
| Thinner | DuPont 8210 |

Table 1 & 2 show anticipated typical physical properties for DuPont 9169 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

Storage and Shelf Life

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

Safety and Handling

For Safety and Handling information pertaining to this product, read the Material Safety Data Sheet (MSDS).

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