

DUPONT[™] 5064H

SILVER CONDUCTOR

PRODUCT DESCRIPTION

DuPont[™] 5064H silver conductor was developed for applications where cost efficient properties are required. This product uses a unique combination of Ag powder and resin technology providing superior conductivity and performance. This composition is solvent-based and was designed to be screen printed in semiautomatic or high volume reel-to-reel applications.

PRODUCT BENEFITS

- Good printability
- Outstanding electrical conductivity
- High paste coverage
- Excellent adhesion to various substrates

PROCESSING

Screen Printing Equipment

Reel-to-reel, semi-automatic, manual

Substrates

Polyester, paper, card

Screen Type Polyester, stainless steel

Typical Drying Conditions

Static box oven: 130°C/10-20 min Reel-to-reel: 140°C/2 min

Typical Circuit Line Thickness

Printed with 200mesh polyester screen: 9µm

Clean-Up Solvent

Ethylene diacetate or Methyl propasol acetate

Table 1-Composition Properties

Test	Properties
Solids, (%)	63 - 67
Viscosity, (Pa.s) [0.5xRVT, spindle#14, 10rpm]	10 - 20
Thinner	DuPont [™] 8260
Shelf Life (months)	6

Table 2-Typical Physical Properties Printed on 125µm PET film

Test	Properties
Resistivity (m Ω /sq/25 μ m)	≤6
Coverage (cm²/g) [using screen type 200 mesh polyester]	170
Abrasion Resistance (H) [ASTM pencil hardness]	5
Adhesion (B) [ASTM x-hatch, no material removal]	5

Tables 1 and 2 show anticipated typical physical properties for DuPont[™] 5064H based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

Drying

Dry in a well-ventilated box oven or belt/conveyor furnace. Air flow and extraction rates should be optimized to ensure complete removal of solvent from the paste. A strong air flow may help to reduce the drying temperature/time considerably and to achieve the lowest as-printed resistance.



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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).

FOR MORE INFORMATION ON DUPONT[™] 5064H OR OTHER DUPONT MICROCIRCUIT MATERIALS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-5 K-28926 (5/15)