

# **DUPONT**<sup>™</sup> 5064H

**SILVER CONDUCTOR** 

#### **PRODUCT DESCRIPTION**

DuPont<sup>™</sup> 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 <sup>™</sup> 8260
Shelf Life (months)	6

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

Test	Properties
Resistivity (m $\Omega$ /sq/25 $\mu$ 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<sup>™</sup> 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<sup>™</sup> 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)