

# DuPont 5036

ENCAPSULANT/BLEND MEMBER/HEAT SEAL

## Technical Data Sheet

### Product Description

Polymeric composition DuPont 5036 is solvent-based, screen-printable ink used for heat-sealing circuitry and encapsulant application. It offers the advantages of rapid-curing while maintaining adhesion to both polyester and/or conductors. DuPont 5036 may be used as a blend member for DuPont 7102 and DuPont 7082 carbon conductors. Heat sealing conditions will vary depending on equipment used. A general recommendation would be to cure as directed below, followed by heat-sealing at 120-125°C.

### Product Benefits

- Solvent based protection layer, can be used as barrier for graphic ink overprint

### Processing

- **Screen Printing Equipment**  
Semiautomatic and manual
- **Substrates**  
Polyester, polyimide, epoxy glass
- **Ink Residence Time on Screen**  
> 2 hours
- **Screen Types**  
Stainless steel, Polyester
- **Cure Conditions**  
120° -130°C/5 minute
- **Typical Thickness (after cure) Printed with 200-325-mesh stainless steel screen**  
0.5 - 1.0 mil
- **Clean-up Solvent**  
Methyl propyl acetate

### Dry

Dry and cure in a well ventilated oven or conveyor dryer where the exhaust meets environmental regulations.

**Table 1**  
**Typical Physical Properties on Polyester Film**

Test	Properties
Adhesion Crosshatch (ASTM D2259-78) Dielectric to Polyester Scotch Tape #600 (B) Conductor to Dielectric	No transfer (5) No transfer
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	≥ 1
Operating Use Temperature (°C) (dependent on conductor)	≤ 90
Flexibility (180° crease over DuPont 5007)	No opens
Breakdown Voltage (V/mil DC) (ASTM D150)	500
Dielectric Constant (@ 1kHz) (ASTM D150)	< 5
Insulation Resistance (GΩ/sq/mil)	> 10

**Table 2**  
**Composition Properties**

Viscosity (Pa.S) [Brookfield RVT, 10rp, #14 spindle, 25°C]	25 - 45
Solids (150°C) [%]	28 - 30
Thinner	DuPont 3610
Density, g/cm <sup>3</sup>	1.08
Color	Colorless

Table 1 & 2 show anticipated typical physical properties for DuPont 5036 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

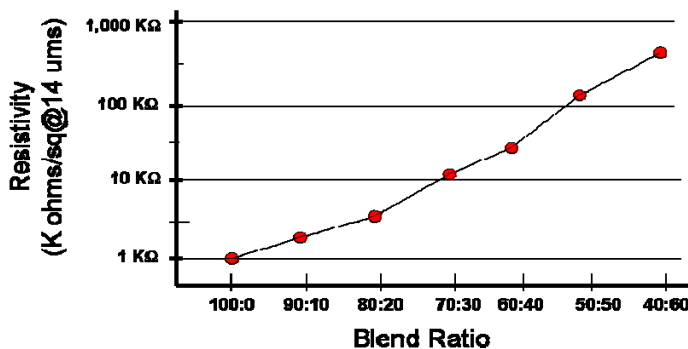
## Storage and Shelf Life

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).

**Blending for Value**  
**7082/5036 Blend Curve**  
**(1,000 Ω– 550,000 Ω/sq@14ums)**



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MCM5036 (7/2012)