

DUPONT[™] KA701

POLYIMIDE ENCAPSULANT/DIELECTRIC

PRODUCT DESCRIPTION

DuPont[™] KA701 is a screen printable polyimide encapsulant. This composition is particularly suited for applications where high operating temperatures are required.

PRODUCT BENEFITS

- Good encapsulant or dielectric
- Good thermal/chemical stability
- Excellent adhesion to a variety of substrates

PROCESSING

Substrates

• Kapton[®] FPC, Kapton[®] RS, FR-4, Aluminum, Alumina, glass

Screen Printing Equipment

- Automatic reel-to-reel
- Semi-automatic flat-bed

Screens

• 200-mesh stainless steel (0.5 – 1.0 mil) A minimum of 2 prints is strongly recommended.

Drying

Box oven: 130-200°C for 30 minutes Reel-to-reel: 130-200°C for 2-4 minutes *Equipment dependent

Clean-up Solvent

Butyl carbitol acetate

Table 1-Typical Composition Properties

Test	Properties
Solids (%) @ 150°C	38.0 - 42.0
Viscosity (PaS) [Brookfield 0.5 x RVT, #14 Spindle, 10 RPM, 25°C]	50 - 150
Coverage (cm²/g) @8μm	320
Thinner	DuPont [™] 8218
Color	White

Table 2-Typical Physical Properties

Test	Properties
Insulation Resistance (GΩ/sq/mil)	~10
Adhesion Crosshatch [ASTM D2259-78] Dielectric to PolyesterScotch Tape #600 (B) Conductor to Dielectric	No transfer*
Flexibility (180°C crease over KA801)	No opens
Breakdown Voltage (kV/mil DC)	>1
Dielectric Constant (@1kHz)	<5

Tables 1 & 2 show anticipated typical physical properties for DuPont[™] KA701 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

*Parts for adhesion dried at 200°C/30min on plasma treated Kapton®.

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).

WARNING

Do not process/use this material above 300°C due to the risk for potential release of hydrogen fluoride.

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FOR MORE INFORMATION ON DUPONT[™] KA701 OR OTHER DUPONT MICROCIRCUIT MATERIALS PRODUCTS, 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-29319 (6/16)