DUPONT™ ME774

CROSSOVER DIELECTRIC

PRODUCT DESCRIPTION

ME774 is part of the DuPont suite of materials developed for In Mold Electronic applications. ME774 is a UV curable crossover dielectric capable of withstanding thermoforming and overmolding temperatures. This composition is intended to be used for low elongation Capacitive Switch applications.

PRODUCT BENEFITS

- UV curable
- Thermoformable dielectric

PROCESSING CONDITIONS

Substrates

Polycarbonate, surface-treated polyester

Screen Printing Equipment

Reel-to-reel, semi-automatic or manual

Ink Residence Time on Screen

>1 Hour

Screen Types

Polyester, stainless steel

Typical UV Curing Conditions

500 – 1000mj/cm^2

Typical Circuit Line Thickness

7-10 Microns

Printed with SD 56/36 (280mesh) stainless steel or 77 – 48 PET Screen

Clean-Up Solvent

Ethylene glycol diacetate

Table 1. Composition Properties

Test	Properties
Solids (%) @ 750°C	21.5 – 24.5
Viscosity (Pa.s) [RVT #14, 10 RPM, 25°C]	8 – 20
Color	Green
Thinner	Not Recommended
Shelf Life (months)	6

Table 2. Typical Physical Properties

Test	Properties
Dielectric Constant (at 1KHz)	~4
Insulation Resistance (100V for 1 min)	>10^{10}
Breakdown Voltage (V/25µm)	>1kV
Abrasion Resistance (ASTM Pencil Hardness)	>1H
Adhesion X-Hatch	No transfer
Coverage (cm^2/g)	0.6 mil [15µm] coating given by 230-mesh polyester 375

Tables 1 and 2 show anticipated typical physical properties for DuPont™ ME774 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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FOR MORE INFORMATION ON DUPONT™ ME774 OR OTHER DUPONT MICROCIRCUIT MATERIALS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

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