



# DUPONT™ ME772

## PROTECTIVE DIELECTRIC

### PRODUCT DESCRIPTION

ME772 is part of the DuPont suite of materials developed for In-Mold Electronics applications. ME772 is designed to be used as an under-print to provide additional mechanical and environmental protection. This composition is intended to be used for Capacitive Switch Applications. ME772 may also be used as a crossover dielectric if sufficient thickness ( $\geq 20\mu\text{m}$ ) is achieved.

### PRODUCT BENEFITS

- DuPont™ MExxx compatible
- Excellent adhesion on PC
- Good performance after thermoforming and Injection Molding
- Good moisture barrier properties

### 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 Drying Conditions

On polycarbonate, minimize the time between printing/drying:

Box oven: 120°C for 20 minutes

Reel-to-reel: 120°C for 4 minutes

#### Typical Circuit Line Thickness

6 microns

Printed with SD 56/36 (280mesh) s/steel or 61-64 PET Screen

#### Clean-up Solvent

Ethylene glycol diacetate

Table 1-Composition Properties

Test	Properties
Solids (%) @ 150°C	21.0 - 24.5
Viscosity (Pa.s) [Brookfield 0.5 x RVT, 10 RPM, 25°C]	20 - 50
Color	Colorless
Thinner	DuPont™ 8260
Shelf Life (months)	6

Table 2-Typical Physical Properties

Test	Properties
Dielectric Constant (at 1KHz)	4.8
Dissipation Factor (Tan $\delta$ at 28 $\mu\text{m}$ )	0.022
Insulation Resistance (100V for 1min)	$2.5 \times 10^{15}$
Abrasion Resistance (ASTM Pencil Hardness)	$\geq 2\text{H}$
Adhesion x-hatch	No transfer
Coverage ( $\text{cm}^2/\text{g}$ at 6 $\mu\text{m}$ )	390

Tables 1 and 2 show anticipated typical physical properties for DuPont™ ME772 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 ( $< 25^\circ\text{C}$ ). 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).



## DUPONT™ ME772 PROTECTIVE DIELECTRIC

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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-28730 (11/16)