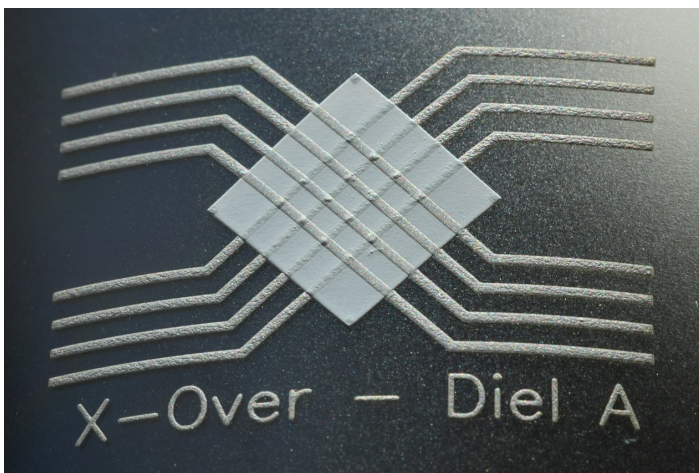


DuPont™ ME779

Crossover Dielectric

Product Description

DuPont™ ME779 is a part of the DuPont suite of materials developed for In-Mold Electronic applications. ME779 is a solvent based crossover dielectric designed to be used in complex, stretchable multilayer circuits. It performs well in thermoformed and over-molded applications due to its unique chemistry.



Product Benefits

- Excellent printability with minimal pin-holing
- High dielectric insulation properties with 2-3 printed layers
- High breakdown voltage
- High elongation with minimal/no cracking after thermoforming

Typical Physical and Electrical Properties

| Test | Properties |
|---|--------------|
| Solids, (%) @ 150°C | 65 – 67 |
| Viscosity, (Pa.s) [Brookfield RVT #14 Spindle; 10 RPM, 25°C] | 50 – 70 |
| Thinner | DuPont™ 3610 |
| Coverage (cm ² /gr @ 10µm thickness) | 290 |
| Recommended total crossover thickness (µm) | >25 |
| Dielectric Constant | 18 |
| Adhesion to Polycarbonate Scotch Tape #600, Crosshatch (ASTM D3359) | 5 |
| Breakdown Voltage [1mm traces at 90 degrees with >= 25µm dielectric] (kV) | > 2.5 |
| Color | White |

This table shows anticipated typical physical properties for DuPont™ ME779 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request. Coverage value based on printing with a 280-030 (0.0012" wire diameter) stainless steel screen.

Processing

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

Box oven: 120°C for 20 minutes in a well-ventilated oven

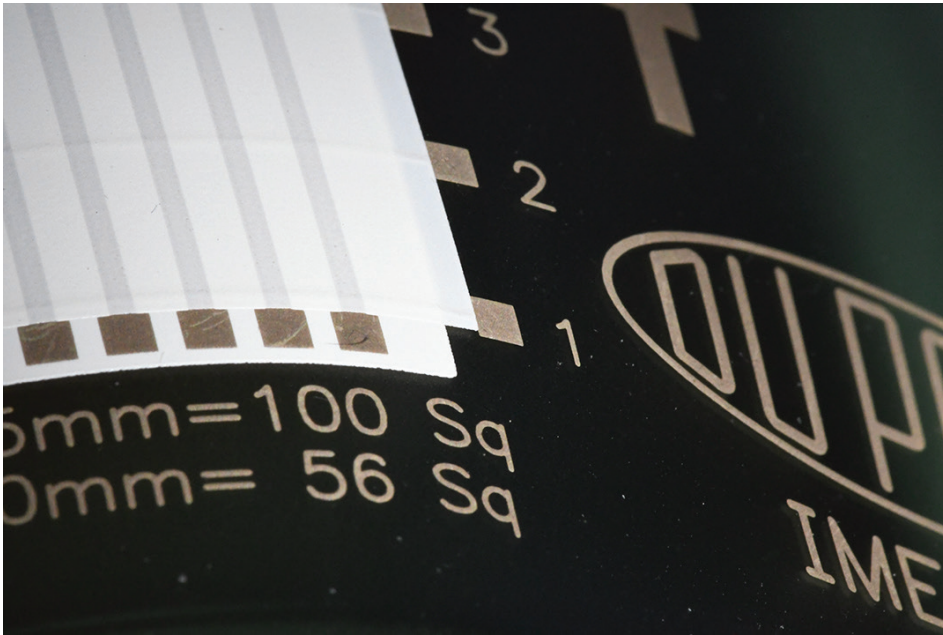
Reel-to-reel: 120°C for 4 minutes in a well-ventilated tunnel dryer

Typical Layer Thickness

7~10µm per layer; printed with a 280-030 (0.0012" wire diameter) stainless steel screen or 77-48 (threads/cm - wire diameter) PET screen.

Clean-Up Solvent

Ethylene glycol diacetate



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 Safety Data Sheet (SDS).



For more information on DuPont™ ME779 or other DuPont products, please visit our website.

electronics.dupont.com

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. It may be subject to revision as new knowledge and experience becomes available. This information is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. Since we cannot anticipate all variations in end-use and disposal conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

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 and "DuPont Policy Regarding Medical Applications" H-50103-5.

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