

DuPont 5056

BENDABLE, WHITE REFLECTOR PASTE

Technical Data Sheet

Product Description

DuPont polymeric composition 5056 is solvent-based, screen-printable ink used applications which require a flexible, reflective solder mask after curing. It offers the advantages of rapid-curing while maintaining adhesion to both copper clad substrates and conductors. Solder mask processing conditions will vary depending on equipment used. A general recommendation would be to cure as directed below at 130-150°C. DuPont 5056 is ideally suited for LED applications on flexible CoolLam® as well as other substrates. A thickness of 25µm is recommended.

Product Benefits

- Will not crack after curing on flexible CoolLam®
- Maintains white color during and after processing for better reflectivity

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**
130° -150°C/5 - 10 minute
- **Typical Thickness (after cure) Printed with 200-325-mesh stainless steel screen**
0.5 - 1.0 mil
- **Clean-up Solvent**
Methyl propol 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 Flexible CoolLam®

Test	Properties
Adhesion Crosshatch (ASTM D2259-78) Dielectric to Polyester Scotch Tape #600 (B)	No transfer (5)
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	≥ 1
Flexibility (45° bend)	No cracking
Continuous Operating Use Temperature (°C) [dependent on conductor]	≤ 120

Table 2
Composition Properties

Viscosity (Pa.S) [Brookfield RVT, 10rpm, #14 spindle, 25°C]	45 - 85
Solids (150°C) [%]	48 - 53
Thinner	DuPont 8260
Density, g/cm ³	1.35
Color	White

Table 1 & 2 show anticipated typical physical properties for DuPont 5056 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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