TECH DATA SHEET

DMI-3006A Low Stress Wafer Buffer Coating

DESIGNER MOLECULES INC.

DESCRIPTION

DMI-3006A is a unique low viscosity photoimageable, negative tone, liquid bismaleimide based formulation. The material comes pre-catalyzed for UV curing and forms tough, hydrophobic, cross-linked polyimides. The material has excellent low pH hydrolytic resistance and thermal stability. DMI-3006A is an enhanced version of DMI-3006.

HIGHLIGHTS

- Pre-catalyzed
- Low viscosity liquid formulation
- Hydrophobic
- High adhesion to various substrates
- Superior thermal stability
- Fast curing

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES*

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Yellow to amber liquid
Viscosity @ 25°C	Cone and Plate @ 5 rpm	420 cP
Glass Transition	DMA	55°C
Modulus @ 25°C	DMA	62 MPa
Tensile Strength	Instron	3.79 MPa
Elongation	Instron	133 %
Dielectric Constant (DK)	Cavity Perturbation Method @ 20 GHz	2.25
Dissipation Factor (Df)		0.0037
Decomposition Temperature (5% wt. loss)	TGA	341°C
Recommended Storage Temp		+5°C or Colder

Data is for reference only and may vary depending on testing method used.
**Properties determined using material processed as suggested in the section "Processing Recommendations".*

RECOMMENDED FORMULATION USE:

DMI-3006A is recommended for use as a catalyzed additive or base resin in adhesives or coatings that are designed for photoimaging and low stress applications. It has excellent adhesion to a variety of substrates and can be processed using typical photoresist systems. When used alone, it can produce films that are tough, flexible and demonstrate good peel strength.

PROCESSING RECOMMENDATIONS:

Application: Spin coating. Other application systems may also be used (flood coat, jetting)
Drying: Typically, 15 - 30 minutes at 100ºC is sufficient to remove solvent (thickness dependent)
UV Exposure: ~250 mJ/cm^2. High pressure mercury broadband source. Customers must determine the optimum UV exposure for their system.
Development: After curing, DMI-3006A can be developed using a mixture of 85 wt.% cyclopentanone and 15 wt.% ethanol. Gentle agitation for ~ 1 minute is generally sufficient to remove unexposed material.
Post Develop Dry (PDD): After development, a thermal cycle of 1 hour at 175ºC in air is used for two purposes: 1) complete removal of all solvent traces and 2) develop adhesion.

Please contact Customer Support for any questions regarding this product, its application, processing or use.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support
☎ 858-348-1122
✉ support@designermoleculesinc.com

REF: DMI Part Number: R1397