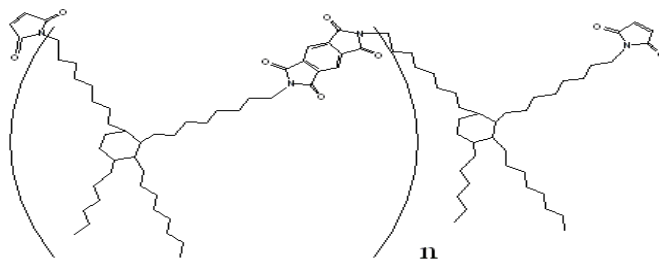


TECH DATA SHEET

BMI-3000 J



10080 Willow Creek Road
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DESCRIPTION

Where n = 1 to 10

BMI-3000 J is a bismaleimide oligomer that exhibits excellent flexibility and, on cure, forms very tough, hydrophobic polyimides. BMI-3000 J has been processed specifically to limit the content of species < 1,000 Daltons to less than 1% by weight making registration easier in some countries. The material has excellent low pH hydrolytic resistance and thermal stability. As an additive it can improve rheological properties by increasing the thixotropic properties of a liquid monomer composition. This feature in turn can help to reduce resin bleed out on a variety of surfaces. It is soluble in most aromatic and aliphatic solvents such as toluene, xylene, NMP, etc. It can be processed in a resin system as a solid or dissolved in solvent.

HIGHLIGHTS

• Toughener	• Excellent dielectric properties
• Hydrophobic	• Superior thermal stability

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Light yellow powder
Functionality		2
Molecular Weight (approximate)		3,000 Daltons
Tg; CTE α_1/α_2	TMA	74 °C; > 100 ppm/°C
Tg	DMA	65°C
Modulus	DMA	313 MPa
Dielectric Constant (Dk)	Cavity Perturbation Method @ 20 GHz	2.3
Dissipation Factor (Df)		0.0017
Weight Loss @ 300°C	TGA	< 0.5%
Melting Point (typical)	DSC	80°C
Decomposition Temperature Td (5%)	TGA	438°C
Elongation	Instron	150%
Water Absorption	23°C/24 hr. immersion	0.28%
Continuous Operating Temperature (approximate)		< 180 °C
Recommended Storage Temp		25 °C or below

Evaluations performed on samples cured at 175°C for 1 hr. using 2 wt.% Dicumyl Peroxide catalyst.

Data is for reference only and may vary depending on testing method used. The structure shown above is an idealized representation of a statistical distribution.

RECOMMENDED FORMULATION USE:

BMI-3000 J is recommended for use as an additive to increase flexibility, hydrophobicity and thixotropy. It has excellent adhesion to a variety of organic substrates and adhesion to metals can be enhanced via coupling agents. When used as a base resin, it can produce films that are tough, flexible and demonstrate good peel strength.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support ☐
support@designermoleculesinc.com
REF: DMI Part Number: R1288