# TECH DATA SHEET BMI-2500



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#### DESCRIPTION

BMI-2500 has been designed to extend the range of applications suitable for use with the Designer Molecules, Inc. imide extended bismaleimide oligomers to those in need of higher Tg and modulus. 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 a solvent.

#### HIGHLIGHTS

Toughener	<ul><li>Increased Tg and modulus for demanding applications</li><li>Superior thermal stability</li></ul>	
Hydrophobic		

#### **TYPICAL PHYSICAL AND CHEMICAL PROPERTIES**

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Light yellow glassy powder
Functionality		2
Glass Transition	ТМА	105 °C
Glass Transition	DMA	148 °C
CTE α1 / α2	ТМА	89 ppm/°C / 189 ppm/°C
Modulus @ 25°C	DMA	594 MPa
Melting Point (typical)	DSC	84 °C
Weight Loss @ 300°C	TGA	< 0.5 %
Decomposition Temperature – Td (5%)	TGA	438 °C
Dielectric Constant (Dk)	Cavity Perturbation Method @ 20GHz	2.3
Dissipation Factor (Df)		0.0015
Water Absorption	Immersion 23 °C/24 hr.	0.25 %
Continuous Operating Temperature (approximate)		< 180 °C
Recommended Storage Temp		25 °C or below

Data is for reference only and may vary depending on testing method used.

### **RECOMMENDED FORMULATION AND USE:**

BMI-2500 is recommended for use as an additive to increase flexibility, hydrophobicity and thixotropy. When used as a base resin, it can produce films that are tough, flexible and demonstrate good peel strength. BMI-2500 is compatible with PPE and Acrylates for free radical reaction and epoxy with anionic cure.

## CONTACT:

#### **REQUEST A SAMPLE OR PLACE AN ORDER**

Customer Support

■ 858-348-1122
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REF: DMI Part Number: R1316

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