

# TECH DATA SHEET

## BMI-6100



### DESCRIPTION

**BMI-6100** is a high molecular weight, curable bismaleimide (BMI) oligomer mixture suitable for use as the base resin in a variety of microelectronic assembly applications. The resin is supplied pre-dissolved in anisole (methoxy benzene) for ease of incorporation. The unique **BMI-6100** joins the nature of a thermoplastic resin (flexibility, high strength) and a BMI thermoset resin (curability, hydrophobicity, ease of customer use) together with superior electrical properties for the next generation of high frequency applications.

### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	CONDITIONS	RESULT
Appearance at Room Temperature	Visual	Amber Liquid
Resin content	Gravimetric	25%
Viscosity @ 25°C	Cone & Plate @ 5 RPM	370 cP
Glass Transition (Tg) dependent upon cure conditions:		
• 185°C cure for 1 hour (catalyzed w/ 2 phr DCP)	TMA	189°C
• 215°C cure for 1 hour (homocure)	TMA	207°C
• 250°C cure for 1 hour (homocure)	TMA	242°C
Coefficient of Thermal Expansion (CTE, $\alpha_1$ )	TMA	26 ppm/°C
Water Absorption	24 hr. immersion @ 23°C	0.29%
Tensile Strength @ 25°C	Instron	87 MPa
Modulus @ 25°C	DMA	2 GPa
Dielectric Constant (Dk)	Cavity Perturbation Method @ 20 GHz	2.65
Dissipation Factor (Df)		0.005
Flammability	UL94	V-0
Recommended Storage Temp		Room Temperature

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

### RECOMMENDED FORMULATION USE:

**BMI-6100** is recommended for use as a polyimide (PI) replacement resin in CCL applications. The material has excellent green strength in film form prior to curing. Sub-200°C curing is possible with the addition of a peroxide free-radical catalyst or the material may be homocured (no catalyst) at higher temperatures to increase the Tg.

It is the responsibility of the customer to select the required adhesion enhancing additives, catalysts, fillers, etc. when formulating with **BMI-6100**.

### CONTACT:

#### REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support

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REF: DMI Part Number: R1356