

TECH DATA SHEET

BMI-4200



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DESCRIPTION

BMI-4200 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, anisole, NMP, etc. It can be processed in a resin system as a solid or dissolved in a solvent.

HIGHLIGHTS

- Toughener
- Hydrophobic
- Increased Tg and modulus for demanding applications
- Superior thermal stability

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Yellow granules
Glass Transition Temperature	TMA	150 °C
	DMA	197 °C
CTE α_1 / α_2	TMA	121 ppm/°C / 291 ppm/°C
Modulus @ 25 °C	DMA	1.15 GPa
Melting Point (typical)	DSC	N/A
Weight Loss @ 300 °C	TGA	< 2.5%
Decomposition Temperature – Td (5%)	TGA	448.3 °C
Dielectric Constant (DK)	Cavity Perturbation Method @20 GHz (Dried)	2.64
Dissipation Factor (Df)		0.00206
Recommended Storage Temp		25°C

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

PROCESSING RECOMMENDATIONS:

BMI-4200 is recommended for use as an additive to increase hydrophobicity and thixotropy. When used as a base resin, it can produce films that are tough and demonstrate good peel strength. BMI-4200 is compatible with many acrylate resins for free radical curing and epoxy with anionic cure.

Typical processing includes drying at 100°C to remove the solvent and curing at 200°C for one hour using 2 phr of a free-radical generating catalyst (e.g. dicumyl peroxide).

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

CONTACT:

REQUEST A SAMPLE

Customer Support

☎ 858-348-1122

✉ support@designermoleculesinc.com

REF: DMI Part Number: R1453