BMI-1400

DESIGNER MOLECULES INC.
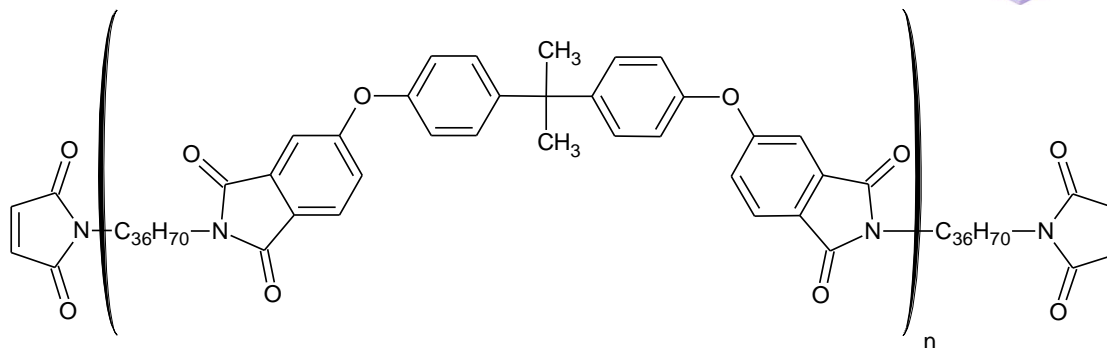

Where n = 1 to 10

DESCRIPTION

BMI-1400 is a lower viscosity version of our successful BMI-1700 resin. It is an amorphous, low molecular weight bismaleimide oligomer that exhibits good adhesion to a variety of substrates. It can be homo-cured via UV or free radical initiators to form tough, hydrophobic, cross-linked polyimides. The material has excellent low pH hydrolytic resistance and thermal stability. The amorphous nature of this imide-extended BMI allows it to form room-temperature-stable solutions in a variety of free radical reactive diluents. It is soluble in most aromatic and aliphatic solvents such as toluene, xylene, NMP, etc.

HIGHLIGHTS

- Soluble in many reactive diluents
- Hydrophobic
- High adhesion to various substrates
- Superior thermal stability

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Amber, high viscosity liquid
Functionality		2
Molecular Weight (approx.)	GPC	1,715 Daltons
Weight Loss @ 300°C	TGA	< 1.5%
Viscosity @ 60°C in solvent	Cone and Plate @ 5 rpm	5,500 ± 2,000 cP
Dielectric Constant (Dk)	Cavity Perturbation Method @ 20GHz	2.3
Dissipation Factor (Df)		0.00245
Modulus @25°C	DMA	503 GPa
Tg	DMA	45°C
Td (5%)	TGA	> 412°C
Recommended Storage Temp		Room Temperature
Continuous Decomposition		< 180°C

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-1400 is recommended for use as an additive or base resin in adhesives that are designed for high temperature resistance. It has excellent adhesion to a variety of substrates. 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

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REF: DMI Part Number: R1232

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