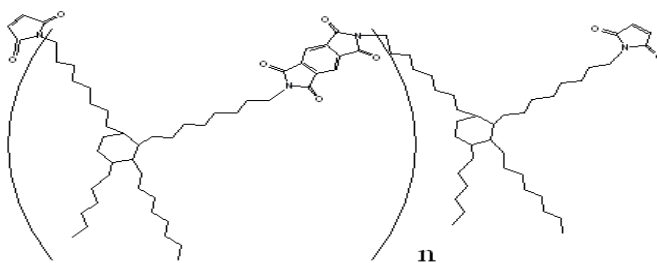


TECH DATA SHEET

BMI-3000 Solution



10080 Willow Creek Road
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DESCRIPTION

Where $n = 1$ to 10

BMI-3000 Solution is a bismaleimide oligomer that exhibits excellent flexibility and, on cure, forms very tough, hydrophobic polyimides. **BMI-3000 Solution** has been prepared in toluene solvent to reduce price and increase the ease of use for the customer. 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.

HIGHLIGHTS

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

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| PROPERTY | METHOD | RESULT |
|--|-------------------------------------|---------------------|
| Appearance at Room Temperature | Visual | Light Amber Liquid |
| Functionality | | 2 |
| Resin Content | Variable | Approx. 50 wt.% |
| Tg; CTE α_1/α_2 | TMA | 37 °C; > 100 ppm/°C |
| Modulus @ 25°C | DMA | 211 MPa |
| Dielectric Constant (Dk) | Cavity Perturbation Method @ 20 GHz | 2.4 |
| Dissipation Factor (Df) | | 0.0017 |
| Decomposition Temperature Td (5%) | TGA | 436°C |
| Elongation | Instron | 125% |
| 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 after solvent removal 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 Solution 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: R1288S