

TECH DATA SHEET

DMI-2555



DESCRIPTION

DMI-2555 is a unique low viscosity liquid bismaleimide based formulation. DMI-2555 is an enhanced version of DMI-2550 that incorporates additives to increase adhesion to a variety of surfaces. The material comes pre-catalyzed for thermal curing and forms tough, hydrophobic, cross-linked polyimides. The material has excellent low pH hydrolytic resistance and thermal stability. DMI-2555 is solvent free and its amorphous nature allows it to be used in a variety of applications or where a low viscosity, free radically cured resin is required. It is soluble in most aromatic and aliphatic solvents such as toluene, xylene, NMP, etc.

HIGHLIGHTS

- Pre-catalyzed
- Low viscosity liquid formulation
- Hydrophobic
- Solvent free
- Superior thermal stability
- High adhesion to various substrates

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Yellow to amber liquid
Viscosity @ 25°C	Cone and Plate @ 5 rpm	900 ± 150 cP
Glass Transition*	TMA	41°C
CTE α_1 / α_2 *	TMA	147 ppm/°C / 197 ppm/°C
Modulus @ 25°C*	DMA	0.36 GPa
Tensile Strength*	Instron	1,767 PSI / 12.2 MPa
Elongation*	Instron	4.8 %
Volumetric Shrinkage During Cure*		4.0 %
Moisture Absorption*	24 hr. immersion @ 23°C	0.12 %
Weight Loss @ 300°C*	TGA (cured at 150°C, 2 hr.)	< 1.5 %
Decomposition Temperature*	TGA	> 420 °C
Recommended Storage Temp		+5°C or Colder

* DMI-2550 data. Data is for reference only and may vary depending on testing method used

RECOMMENDED FORMULATION USE:

DMI-2555 is recommended for use as a catalyzed additive or base resin in adhesives or coatings that are designed for high temperature resistance. It has excellent adhesion to a variety of substrates. When used alone, it can produce films that are tough, flexible and demonstrate good peel strength.

CURING RECOMMENDATIONS:

DMI-2555 is designed for thermal curing. A minimum of one hour at 150°C is a recommended starting point. Higher temperatures (up to 175 – 180°C) will result in significantly shorter cure time requirements. Curing below 150°C is not recommended. Due to its solvent free nature, the curing of DMI-2555 is generally independent of ramp rate – both hot plate or oven are acceptable curing devices. Nitrogen atmosphere is not required but may reduce any oxygen poisoning that may occur on the surface of the material.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support

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REF: DMI Part Number: R1267C