TECH DATA SHEET - PRELIMINARY

ILR-1363

DESCRIPTION

ILR-1363 is a high molecular weight, curable 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 **ILR-1363** joins the nature of a thermoplastic resin (flexibility, high strength) and a 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	750 cP
Glass Transition (Tg)	TMA	215 °C
Coefficient of Thermal Expansion (CTE, α1)	TMA	93 ppm
Water Absorption (% wt. gain)	24 hr. immersion @ 23ºC	0.4 %
Tensile Strength @ 25ºC	ASTM D 638-02a	77 MPa
Modulus @ 25ºC	DMA	1.3 GPa
Dielectric Constant (Dk)	Cavity Perturbation Method @ 20GHz	2.6
Dissipation Factor (Df)		0.0042
Td (5%)	TGA	450 ºC
Flammability	UL94	V-0
Recommended Storage Temp		Room Temperature

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:

ILR-1363 is recommended for use as a polyimide (PI) replacement resin in FCCL and CCL applications. The material has excellent green strength in film form prior to curing. The material may be homocured (no catalyst) at higher temperatures to increase the Tg. Generally curing for 1 hour at 200ºC is sufficient for a completely dry film.

Film formation should include a drying step sufficient to remove all of the anisole solvent in the mixture. Depending upon film thickness 110 – 115ºC for one or more hours is generally required.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support
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REF: DMI Part Number: ILR-1363