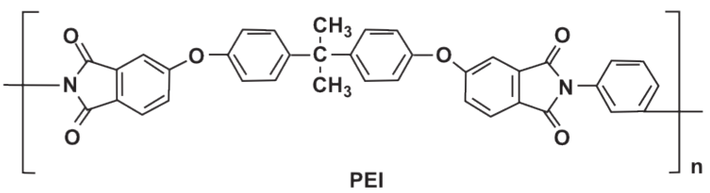
GHARDAPOLYMERS™

PEI

PEI - Polyether Imide (GIMIDE™)

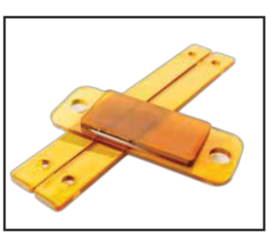
PEI is an amorphous thermoplastic resin that combines excellent thermal properties, exceptional dimensional stability, inherent flame retardancy and good chemical resistance.

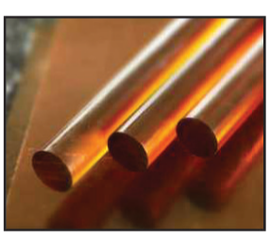


PEI

Key Points for GIMIDE™

- Amorphous Thermoplastics
- Glass Transition Temperature (Tg) of 217°C
- Low Outgassing
- Excellent Hydraulytic Stability
- Excellent Dimensional Stability
- Amber Transparent



Applications:

- Auto Head Lamp Assembly
- Food Trays
- Semiconductor chip manufacturing Equipments
- Electrical Switchgear components
- Medical Sterilization Equipments / Trays

GIMIDE™ Grades:

Gharda Polymers has developed various grades as per the market and customer requirement according to applications. GIMIDE™ is available in unfilled as well filled polymers in granules form.

Grade	Viscosity	Application
7200G	High Viscosity	Compounding, Injection Molding and Extrusion
7300G	Medium Viscosity	Compounding, Injection Molding and Extrusion

G – Granules

Gharda Polymers provide technical solutions for new development and new applications with technical as well as commercial support to fulfil and establish the product for end applications

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Typical Properties	Test method / Conditions	Unit	7200G	7300G
General Properties				
Density	23°C	g / cc	1.28	1.28
MVR (360°C @ 5kgs Load)	ASTM D 1238	cc / 10 min	16.5	26.5
Water Absorption	ASTM D 570-98	%	0.5	0.5
Thermal Properties				
Glass Transition Temperature (Tg)	ASTM D 3418	°C	217	217
Heat Deflection Temperature (HDT)	ASTM D 648 / 1.8 MPa	°C	195	195
Continuous Use Temperature	UL 746B	°C	190	190
Mechanical Properties				
Tensile Strength	ASTM D 638	MPa	110	111
Tensile Modulus	ASTM D 638	GPa	3.5	3.7
Elongation at Break	ASTM D 638	%	29.5	30
Flexural Strength	ASTM D 790	MPa	175	185
Flexural Modulus	ASTM D 790	GPa	3.5	3.8
Izod Impact Strength (Notched)	ASTM D 256	J/m	30	36
Izod Impact Strength (Un-Notched)	ASTM D 256	J/m	855	843
Flammability	UL 94/0.8 mm	-	V-0	V-0

All the properties are tested under standard Laboratory conditions *Material Tested up to 190°C continuously in Gharda Laboratory

The addition of Glass Fibre reinforcement drastically increases the mechanical properties at various temperatures. Addition of Carbon Fibre filled grades helps in reduction of thermal expansion rates and improves thermal conductivity. We also have specialized wear grade for Tribological applications mainly for Textile, Automotive Industry and more.

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