ColorFast® PEI1000

Product Description PEI1000 is a medium flow injection molding grade of transparent polyetherimide (PEI) with excellent strength properties, and high chemical and flame resistance. It is suitable for a wide range of applications.

Material Status Commercial: Active

Availability Africa & Middle East, Asia Pacific, Europe, Latin America, North America

Features Excellent Colorability

Uses Aerospace Applications, Connectors, Consumer Applications, Engineering Parts, Industrial Applications, Industrial Parts, Military/Defense Applications, Oil/Gas Applications, Outdoor Applications

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	9.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.50 to 0.70	%	ASTM D955
Water Absorption (24 hr)	1.3	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength [3] (Yield)	110	MPa	ASTM D638
Tensile Elongation [3]			ASTM D638
Yield	7.0	%	
Break	60	%	
Flexural Modulus	3510	MPa	ASTM D790
Flexural Strength [3]	165	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	53	J/m	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm	201	°C	

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
> 0.40 mm	V-2		
> 0.75 mm	V-0		
NBS Smoke Density - Flaming, Ds 4 min	0.700		ASTM E662

Properties provided are only typical values and Americhem assumes no liability for the customer's use of the information provided. The customer assumes all responsibility for testing determining this products suitability in the customer's specific end application.

Revision Date: 9/16/2024

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Notes

[1] The property values are based on natural product, values may be affected by coloring of the product.

[2] Typical properties: these are not to be construed as specifications.

[3] 50 mm/min

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