



Technical Data Sheet

Phoensar® B1600 MR45

45% Glass/Mineral Reinforced Polybutylene-Terephthalate (PBT)

Date: January, 2008

General

Features	Excellent dimensional stability Low water absorption Elevated temperature capability
Appearance	Off white opaque or pigmented Pellets
Processes	Injection molding

Typical Compound Properties^(a)

Physical	Nominal Values		Test Methods ^(b)
	English Units	Metric Units	
Specific Gravity	1.69	1.69	ASTM D792
Linear Mold Shrinkage	0.003 in/in	0.003 mm/mm	ASTM D955
Hardness, Rockwell Scale	R118	R118	ASTM D785
Coefficient of Linear Thermal Expansion	7.22×10^{-6} in/in °F	1.30×10^{-5} cm/cm °C	ASTM D696
Water Absorption	0.07%	0.07%	ASTM D785
Reinforcement Content	45±2%	45±2%	ASTM D2584

Mechanical

Notched Izod Impact @ 73 °F (23 °C)	1.4 ft-lb/in.	74.7 J/m	ASTM D256
Tensile Strength @ Yield	15,900 psi	109.7 MPa	ASTM D638
Elongation @ Yield	2%	2%	ASTM D638
Flexural Strength	25,000 psi	172.4 MPa	ASTM D790
Flexural Modulus, tangent	1,320,000 psi	9,103 MPa	ASTM D790
Heat Deflection Temperature @ 264 psi (1.82 MPa)	400 °F	204 °C	ASTM D648

(a) Values shown represent nominal averages and are not to be construed as product specifications.

(b) ASTM methods are the latest under the Society's current Procedures. All Molded specimens are prepared by injection molding.

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