



Technical Data Sheet

Phoenamide® N1600 G43 43% Glass Reinforced Polyamide (Nylon) Type 6

Date: January, 2008

General

Features	Excellent chemical resistance Excellent stiffness and elevated temperature capability Good surface appearance
Appearance	Off white or pigmented Pellets
Processes	Injection molding

Typical Compound Properties^(a)

Physical	Nominal Values		Test Methods ^(b)
	English Units	Metric Units	
Relative Viscosity	50.0 cP	50.0 kPa•s	ASTM D789
Melt Point	419 °F	215 °C	ASTM D789
Specific Gravity	1.49	1.49	ASTM D792
Water Absorption	0.80%	0.80%	ASTM D570
Linear Mold Shrinkage	0.002 in/in	0.002 mm/mm	ASTM D955
Hardness, Rockwell Scale	R121	R121	ASTM D785
Coefficient of Linear Thermal Expansion	1.20 x 10 ⁻⁵ in/in °F	2.16 x 10 ⁻⁵ cm/cm °C	ASTM D696
Reinforcement Content	43±2%	43±2%	ASTM D2584

Mechanical^(c)

Notched Izod Impact @ 73 °F (23 °C)	2.5 ft-lb/in.	133.5 J/m	ASTM D256
Tensile Strength @ Yield	29,000 psi	200.0 MPa	ASTM D638
Elongation @ Break	2%	2%	ASTM D638
Flexural Strength	38,500 psi	265.5 MPa	ASTM D790
Flexural Modulus, tangent	1,750,000 psi	12,069 MPa	ASTM D790
Heat Deflection Temperature			
@ 66 psi (0.455 MPa)	430 °F	221 °C	ASTM D648
@ 264 psi (1.82 MPa)	410 °F	210 °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.

(c) Properties measured on "Dry As Molded" test specimens.

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