



# Technical Data Sheet

## Phoenamide® N1600 G30 30% 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

<i>Typical Compound Properties<sup>(a)</sup></i>		<i>Nominal Values</i>		<i>Test Methods<sup>(b)</sup></i>	
<b>Physical</b>		<b>English Units</b>	<b>Metric Units</b>		
Relative Viscosity	50.0 cP	50.0 kPa•s	ASTM D789		
Melt Point	419 °F	215 °C	ASTM D789		
Specific Gravity	1.36	1.36	ASTM D792		
Water Absorption	1.10%	1.10%	ASTM D570		
Linear Mold Shrinkage	0.003 in/in	0.003 mm/mm	ASTM D955		
Hardness, Rockwell Scale	R121	R121	ASTM D785		
Coefficient of Linear Thermal Expansion	1.80 x 10 <sup>-5</sup> in/in °F	3.24 x 10 <sup>-5</sup> cm/cm °C	ASTM D696		
Reinforcement Content	30±2%	30±2%	ASTM D2584		

### Mechanical<sup>(c)</sup>

Notched Izod Impact @ 73 °F (23 °C)	2.0 ft-lb/in.	106.8 J/m	ASTM D256
Tensile Strength @ Yield	24,000 psi	172.4 MPa	ASTM D638
Elongation @ Break	3%	3%	ASTM D638
Flexural Strength	34,700 psi	239.3 MPa	ASTM D790
Flexural Modulus, tangent	1,300,000 psi	8,966 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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