



Technical Data Sheet

Phoenamide® N1200

Polyamide (Nylon) Type 6 – High Impact

Date: January, 2008

General

Features	Excellent chemical resistance Excellent toughness Excellent low temperature impact
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	1.10	1.10	ASTM D792
Water Absorption	1.50%	1.50%	ASTM D570
Linear Mold Shrinkage	0.012 in/in	0.012 mm/mm	ASTM D955
Hardness, Rockwell Scale	R110	R110	ASTM D785
Coefficient of Linear Thermal Expansion	6.00 x 10 ⁻⁵ in/in °F	1.04 x 10 ⁻⁴ cm/cm °C	ASTM D696

Mechanical^(c)

Notched Izod Impact @ 73 °F (23 °C)	15.0 ft-lb/in.	800.9 J/m	ASTM D256
Tensile Strength @ Yield	7,200 psi	49.7 MPa	ASTM D638
Elongation @ Break	240%	240%	ASTM D638
Flexural Strength	11,000 psi	75.9 MPa	ASTM D790
Flexural Modulus, tangent	245,000 psi	1,690 MPa	ASTM D790
Heat Deflection Temperature			
@ 66 psi (0.455 MPa)	290 °F	143 °C	ASTM D648
@ 264 psi (1.82 MPa)	140 °F	60 °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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