

Nymax™ 1010 A Natural

Polyamide 6

Key Characteristics

Product Description

The Nymax® Series of nylon 6 compounds have been specifically developed to deliver outstanding performance in a wide range of application areas. These materials are available with a broad range of fillers, glass reinforcement levels, and impact modifiers depending upon grade selected and have been formulated to offer ease of processing in most standard thermoplastic processing equipment.

General

Material Status	• Commercial: Active		
Regional Availability	• Latin America	• North America	
Additive	• Impact Modifier		
Features	• General Purpose	• Impact Modified	
Uses	• Automotive Applications	• Consumer Applications	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08	ASTM D792
Molding Shrinkage - Flow	0.010 to 0.013 in/in	1.0 to 1.3 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Break)	7200 psi	49.6 MPa	ASTM D638
Tensile Elongation ² (Break)	50 %	50 %	ASTM D638
Flexural Modulus	240000 psi	1650 MPa	ASTM D790
Flexural Strength	10000 psi	68.9 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
-40°F (-40°C), 0.125 in (3.18 mm), Injection Molded	4.0 ft-lb/in	210 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	17 ft-lb/in	910 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	122 °F	50.0 °C	ASTM D648

Additional Information

Molded Test Bars: Dry as Molded

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	0.10 to 0.20 %	0.10 to 0.20 %
Rear Temperature	430 to 490 °F	221 to 254 °C
Middle Temperature	440 to 500 °F	227 to 260 °C

Injection	Typical Value (English)	Typical Value (SI)
Front Temperature	460 to 520 °F	238 to 271 °C
Nozzle Temperature	455 to 515 °F	235 to 268 °C
Mold Temperature	120 to 200 °F	49 to 93 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)