



## Nymax™ 600 A Natural 12

### Polyamide 6 Alloy

#### Key Characteristics

##### Product Description

The Nymax® 600 Blend Series of nylon 6 materials are "salt-and-pepper" pelletized blends combining select nylon resins and process aids, performance modifiers, and color concentrates. These materials have been formulated to provide improved melt processing, part performance, or surface appearance depending upon grade selected and are offered as an economical alternative to fully compounded products.

##### General

Material Status	• Commercial: Active		
Regional Availability	• Latin America	• North America	
Features	• General Purpose	• Lubricated	
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Automotive Specifications	• GM GMP.PA6.033 Color: Natural		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

#### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.14	1.14	ASTM D792
Molding Shrinkage - Flow	0.011 to 0.013 in/in	1.1 to 1.3 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	1.6 %	1.6 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	370000 psi	2550 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Break)	11300 psi	77.9 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	60 %	60 %	ASTM D638
Flexural Modulus	365000 psi	2520 MPa	ASTM D790
Flexural Strength	16000 psi	110 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.0 ft-lb/in	53 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	140 °F	60.0 °C	
Melting Temperature	419 °F	215 °C	ASTM D789
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
Mold Temperature	120 to 200 °F	49 to 93 °C

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**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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