

Nymax[™] 600 A HS Natural A 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 	
Additive	 Heat Stabilizer 		
Features	 General Purpose 	 Heat Stabilized 	
Uses	Automotive ApplicationsConstruction Applications	Consumer ApplicationsGeneral Purpose	Industrial Applications
Automotive Specifications	GM GMP.PA6.008 Color: Black	GM GMP.PA6.008 Color: Natural	
Appearance	 Natural Color 		
Forms	 Pellets 		
Processing Method	 Injection Molding 		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.14	1.14	ASTM D792
Molding Shrinkage - Flow	0.012 in/in	1.2 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	1.7 %	1.7 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Break)	11300 psi	77.9 MPa	ASTM D638
Tensile Elongation ² (Break)	95 %	95 %	ASTM D638
Flexural Modulus	385000 psi	2650 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	1.2 ft·lb/in	64 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	329°F	165 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	145°F	63.0 °C	
Melting Temperature	419°F	215 °C	ASTM D789
Additional Information			

Molded Test Bars: Dry as Molded

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	180 °F	82.2 °C	
Drying Time	4.0 hr	4.0 hr	
Mold Temperature	120 to 200 °F	48.9 to 93.3 °C	

Notes

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¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)