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 [1]

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 [2] (Break)	11300 psi	77.9 MPa	ASTM D638
Tensile Elongation [2] (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

Notes

[1] Typical values are not to be construed as specifications.

[2] Type I, 0.20 in/min (5.1 mm/min)

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas
33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia
No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe
6 Giällewee
+352 269 050 35