



Nymax™ 1010 A Black 13

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 • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08	ASTM D792
Density	1.08 g/cm ³	1.08 g/cm ³	ISO 1183
Molding Shrinkage - Flow	0.012 in/in	1.2 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	1.0 %	1.0 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Break)	7300 psi	50.3 MPa	ASTM D638
Tensile Elongation ² (Break)	70 %	70 %	ASTM D638
Flexural Modulus	280000 psi	1930 MPa	ASTM D790
Flexural Strength	10000 psi	68.9 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	17 ft-lb/in	910 J/m	ASTM D256A
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)	131 °F	55.0 °C	ASTM D648
Melting Temperature	421 °F	216 °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
Suggested Max Moisture	0.10 to 0.20 %	0.10 to 0.20 %

Copyright © 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	430 to 490 °F	221 to 254 °C
Middle Temperature	440 to 500 °F	227 to 260 °C
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)

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

Copyright ©, 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.