

# **NYLON SOLUTIONS** ENGINEERED THERMOPLASTICS



**PRODUCT SELECTION GUIDE** 



## INTRODUCTION

Nylon (polyamide) solutions from PolyOne encompass both custom and standard grades from the Bergamid<sup>™</sup> and Nymax<sup>™</sup> portfolios. These materials, based on nylon 6 (PA6) and nylon 66 (PA66) polymers, provide high temperature performance with exceptional strength and durability. Formulations can be customized with a range of attributes.

CUSTOMIZED NYLON FEATURES											
Description	Base	Filler	Impact Modifiers	Lubrication	UV Stabilization	Heat Stabilization	Flame Retardant	Approvals/ Listings			
Nymax	Recycled	Glass Fiber Mineral	V	5	5	\$		Automotive Approvals NSF Listings			
Bergamid	Prime	Glass Fiber Glass Bead Mineral	✓	V	J	J	V	Automotive Approvals UL Listed			

### BERGAMID

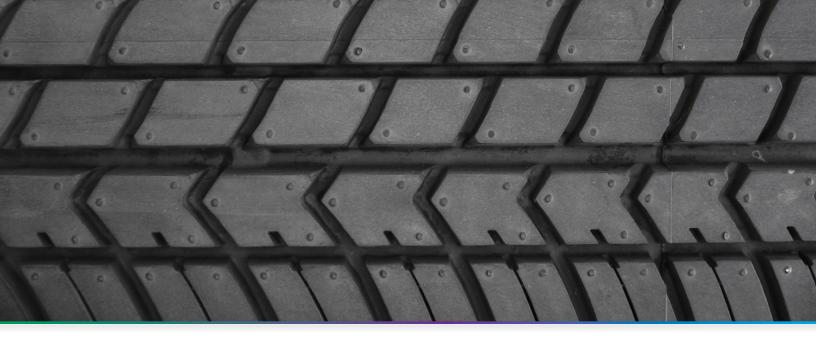
The Bergamid series of PA6 and PA66 polymers are designed to meet critical performance requirements for demanding applications. They provide high mechanical performance within tight specifications. Bergamid solutions meet stringent regulations in applications spanning many industries, including transportation, appliance, and electrical & electronics.



# NYMAX

The Nymax Series of PA6 and PA66 polymers are suited for a wider range of applications than Bergamid materials. This material delivers good performance with exceptional processing characteristics. Nymax is an excellent choice where the balance between performance and price is critical.





NYLON GRADES											
Description	Filler Content	Tensile break ASTM D638 (psi)	Tensile Modulus ASTM D638 (psi)	Tensile Elongation (%) ASTM D638	Flex Modulus ASTM D790 (psi)	lzod Notched (ft-lb/in) RT ASTM D256					
Nylon 6/6 Shelf Grades											
Nymax ND1200 A 33 HS Natural	33% GF	22000		2.00	1.0E+06	1.300					
Nymax ND1233 GF Black	33% GF	21000		2.00	1.3E+06	1.200					
Bergamid A700 G10 Black	10% GF	11297	7.0E+05	2.58	6.3E+05	0.546					
Bergamid A700 G20 Black	20% GF	16248	1.0E+06	2.33	8.6E+05	0.785					
Bergamid A700 G30 Black	30% GF	21190	1.3E+06	2.52	1.2E+06	1.175					
Bergamid A700 G40 Black	40% GF	21540	1.8E+06	2.49	1.6E+06	1.631					
Bergamid A700 G50 Black	50% GF	30817	2.6E+06	2.30	2.1E+06	1.967					
Nylon 6 Shelf Grades											
Nymax ND633 GF Black	33% GF	19000		2.00	1.2E+06	1.200					
Nymax GMF 604 40 UV Black 28	40% GF/MF	19600			1.4E+06	1.200					
Bergamid B700 G10 Black	10% GF	8779	7.2E+05	2.65	5.70E+05	0.612					
Bergamid B700 G20 Black	20% GF	17368	1.0E+06	2.57	8.30E+05	0.968					
Bergamid B700 G30 Black	30% GF	16172	1.4E+06	2.76	1140268	1.493					
Bergamid B700 G40 Black	40% GF	27791	1.8E+06	2.64	1523950	2.121					
Bergamid B700 G50 Black	50% GF	28872	2.4E+06	2.25	1965008	2.307					

To learn more about our PA6 and PA66 solutions, contact PolyOne at +1 866-PolyOne (1-866-765-9663)

# PolyOne\_

#### www.polyone.com

-

Copyright © 2016, 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 literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.