

CAST NYLONS LIMITED

Discover the NYCAST® Advantage

NYCAST® MDX Gray & MDX Blue

NYCAST MDX combines MoS₂ and oil in a superior lubricated grade. High crystallinity combined with good wear properties, give superior material characteristics over NYCAST 6PA MoS₂. The material excels at higher pressure and low speed (up to 40 fpm). It is the ideal material for various slide and wear applications such as wear pads, thrust washers, trunnion bearings and gears. NYCAST MDX is available in gray and blue.



NYLOIL-MDX has slightly higher compressive load capabilities than original NYLOIL. The incorporation of an oil lubricant package into the nylon matrix provides significant advantages over other bearing materials:

Lubrication results in 25% lower coefficient of friction than other grades of nylon. NYLOIL performs in harsh environments where lubrication is difficult, impossible or not desirable (food contact).

- Works successfully in marine applications
- Reduced water absorption promotes higher dimensional stability
- Works and machines as easily as brass
- Oil will not spin out, dry out, or drain out, even under the harshest operating conditions

NYCAST® MDX Gray & MDX Blue Product Specifications

Property	Units	ASTM Test Method	NYCAST® MDX Gray & MDX Blue
Specific Gravity	g/cm ³	D 792	Blue 1.14 - 1.15
Tensile Strength	psi	D 638	10,500 - 11,000
Tensile Elongation	%	D 638	35 - 45
Tensile Modulus	psi	D 638	425,000 - 475,000
Compressive Strength	psi	D 695	13,500 - 14,000
Compressive Modulus	psi	D 695	325,000 - 375,000
Flexural Strength	psi	D 790	15,500 - 16,000
Flexural Modulus	psi	D 790	425,000 - 475,000
Shear Strength	psi	D 732	8,000 - 9,000
Notched Izod Impact	ft.lbs/in.	D 256	1.4 - 1.8
Hardness Rockwell	R	D 785	110 - 115
Hardness, Shore	D	D 2240	74 - 80
Limiting Pressure Velocity	psi-ft/min	-	16,000
Melting Point	°F	D 3418	430 +/- 10
Coefficient of Linear Thermal Expansion	in./in./°F	D 696	5.0 * 10 ⁻⁵
Deformation Under Load	%	D 621	0.7 - 0.8
Deflection Temperature			
264 psi	°F	D 648	200 - 300
66 psi	°F	D 648	300 - 400
Continuous Service Temperature	°F	-	230
Intermittent Service Temperature	°F	-	330
Coefficient of Friction, Dynamic		D 1894	0.12
Water Absorption			
24 hours	%	D 570	0.4 - 0.6
Saturation	%	D 570	4.0 - 5.0
Dielectric Strength	v/mil.	D 149	500 - 600
Dielectric Constant			
60 Hz		D 150	3.7
1000 Hz		D 150	3.7
1 MHz		D 150	3.7



4300 Hamann Parkway | Willoughby, OH 44094
 Telephone: 800-543-3619 Fax: 440-269-2323
 International: +1-440-269-2300 Email: cnlmail@castnylon.com



The facts stated and recommendations contained herein are based on experiments and information to be reliable. No guarantee is made of the accuracy, however, and the products are sold without warranty, expressed or implied, and upon the conditions that purchasers shall conduct tests to determine suitability for their intended use.