



## NYCAST® 6PA XHA blue

CAST NYLONS LIMITED offers a heat stabilized cast nylon 6. The heat stabilizer retards the loss of physical properties as temperature increases. This allows the material to function at approximately 10% higher temperatures than standard grades; meaning NYCAST XHA operating at 200°F (93°C) will have approximately the same physical properties as a standard material at 185°F (85°C). This material has delivered successful performance throughout the years.



The main advantages of NYCAST XHA blue are:

- Can work at higher operating temperatures
- Retains physical properties under higher temperatures
- Light weight
- Excellent abrasion and wear resistance
- Easy to machine

Also available in natural, black and forest green



## Product Data Sheet: NYCAST® 6PA XHA blue

Property	Units	ASTM Test Method	NYCAST® XHA blue
Specific Gravity	g/cm <sup>3</sup>	D 792	1.15 - 1.17
Tensile Strength	psi	D 638	10,000 - 13,500
Tensile Elongation	%	D 638	20 - 30
Tensile Modulus	psi	D 638	450,000 - 550,000
Compressive Strength	psi	D 695	13,500 - 16,000
Compressive Modulus	psi	D 695	325,000 - 400,000
Flexural Strength	psi	D 790	15,000 - 17,500
Flexural Modulus	psi	D 790	420,000 - 500,000
Shear Strength	psi	D 732	10,000 - 11,000
Notched Izod Impact	ft.lbs/in.	D 256	1,0 - 2,5
Hardness Rockwell	R	D 785	110 - 120
Hardness, Shore	D	D 2240	78 - 86
Melting Point	°F	D 3418	430 +/- 10
Coefficient of linear thermal expansion	in./in./°F	D 696	5.0 * 10 <sup>-5</sup>
Deformation under load	%	D 621	0.5 - 2.6
Deflection Temperature			
264 psi	°F	D 648	200 - 400
66 psi	°F	D 648	300 - 450
Continuous service temperature	°F	-	250
Intermittent Service Temperature	°F	-	350
Coefficient of friction, dynamic		D 1894	0.26
Water absorption			
24 hours	%	D 570	0.5 - 0.6
Saturation	%	D 570	4.0 - 6.0
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

The facts stated and recommendations contained herein are based on experiments and information believed 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.