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NYCAST® 6PA (Cast Nylon)

Technical Data Sheet: NYCAST® 6PA Natural and Black

PROPERTIES	UNITS	Nycast 6PA - Nat & Black	TEST METHOD
Specific Gravity	g/cm ³	1.15 - 1.17	ASTM D 792
Tensile Strength	psi	10,000 - 13,500	ASTM D 638
Tensile Elongation	%	20 - 55	ASTM D 638
Tensile Modulus	psi	400,000 - 550,000	ASTM D 638
Compressive Strength	psi	13,500 - 16,000	ASTM D 695
Compressive Modulus	psi	325,000 - 400,000	ASTM D 695
Flexural Strength	psi	15,000 - 17,500	ASTM D 790
Flexural Modulus	psi	420,000 - 500,00	ASTM D 790
Shear Strength	psi	10,000 - 11,000	ASTM D 732
Notched Izod Impact	ft.lbs./in.	1.50 - 2.50	ASTM D 256
Hardness, Rockwell	R	110 - 115	ASTM D 785
Hardness, Shore	D	78 - 84	ASTM D 2240
Melting Point	°F	430 (+/- 10)	ASTM D 3418
Coefficient of Linear Therm Expansion	in./in./°F	5.0 x 10 ⁻⁵	ASTM D 696
Deformation Under Load	%	0.50 - 2.50	ASTM D 621
Deflection Temperature @ 264 psi	°F	200 - 300	ASTM D 648
Deflection Temperature @ 66 psi	°F	300 - 400	ASTM D 648
Continuous Service Temperature	°F	230	---
Intermittent Service Temperature	°F	330	---
Coefficient of Friction, Dynamic	---	0.26	ASTM D 1894
Water Absorption, 24 hours	%	0.5 - 0.6	ASTM D 570
Water Absorption, Saturation	%	4.0 - 6.0	ASTM D 570
Dielectric Strength	v/mil.	500 - 600	ASTM D 149
Dielectric Constant, 60 Hz	---	3.70	ASTM D 150
Dielectric Constant, 1000 Hz	---	3.70	ASTM D 150
Dielectric Constant, 1 MHz	---	3.70	ASTM D 150

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.