


NYCAST® 12 Properties & Overview

<p>NYCAST® 12 is specially formulated and designed to offer:</p> <ul style="list-style-type: none"> • Very low moisture absorption • Superior wear resistance • Dimensional stability • Exceptional lubrication ability • Outstanding mechanical characteristics • High impact strength • Lower thermal expansion 	
<p>NYCAST® 12 for applications in industries such as:</p> <ul style="list-style-type: none"> • Power Transmission • Amusement Park Rides • Valve and Seal Manufacturers • Food processing • Marine 	<p>Typical applications include:</p> <ul style="list-style-type: none"> • Wheels • Rollers • Bearings & Bushings • Gears • Valve Seals

AVAILABILITY:

Rods: 2" – 12" Diameter

24" long

Custom Tube Sizes: quoted upon request

Property	Units	Test Method	Nycast® 12
Specific Gravity		ASTM D792	1.03
Tensile Strength	psi	ASTM D638	7,900
Tensile Elongation	%	ASTM D638	> 50
Tensile Modulus	psi	ASTM D638	230,000
Compressive Strength	psi	ASTM D695	10,000
Compressive Modulus	psi	ASTM D695	224,000
Flexural Strength	psi	ASTM D790	9,000
Flexural Modulus	psi	ASTM D790	238,000
Shear Strength	psi	ASTM D732	6,100
Notched Izod Impact	ft.lbs./in.	ASTM D256	3.02
Hardness, Rockwell	R	ASTM D785	108
Hardness, Shore D	D	ASTM D2240	76
Melting Point	deg. F	ASTM D789	351

Coef. Of Linear Thermal Expansion	in./in./deg.	ASTM D696	5.5x 10 ⁻⁵
Deformation Under Load	F	ASTM D621	
Deflection Temperature: 264 psi	deg. F	ASTM D648	124
66 psi	deg. F	ASTM D648	347
Continuous Service Temperature	deg. F		250
Intermittent Service Temperature	deg. F		300
Coefficient of Friction: Dynamic			.2 - .3
Water Absorption 24 Hours	%	ASTM D570	0.12
Saturation	%	ASTM D570	0.66
Dielectric Strength	v/mil.	ASTM D149	500 - 600
Dielectric Constant		ASTM D150	
60 cycles			3.7
1000 cycles			3.7
100,000 cycles			3.7

All values at 73°F (23°C) unless otherwise noted.

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. Professional Plastics assumes no liability not claims towards the suitability of any material for any particular application.

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