



# NYCAST® 12

**NYCAST® 12**, manufactured by Cast Nylons Limited, is the **only** cast nylon 12 material manufactured in North America. NYCAST® 12 gives engineers yet another superior choice from the **NYCAST®** family of premium grade cast nylons.

**NYCAST® 12** is specially formulated and designed to offer:

- very low moisture absorption
- superior wear resistance
- dimensional stability
- exceptional lubrication ability
- outstanding mechanical characteristics
- high impact strength
- lower thermal expansion

**Typical applications** include:

- Wheels
- Rollers
- Bearings & Bushings
- Gears
- Valve Seals

Specify NYCAST® 12 for applications in industries such as:

- Power Transmission
- Amusement Park Rides
- Valve and Seal Manufacturers
- Food processing
- Marine

## AVAILABILITY:

Rods: 2" – 12" Diameter  
24" long

**Custom Tube Sizes:** quoted upon request



Cast Nylons Limited (CNL) has been manufacturing NYCAST® cast nylon stock shapes and molded components since March of 1980.

CNL is the premier producer of cast nylon in North America with:

- over fifteen different NYCAST® grades
- extensive \$800,000 inventory
- excellent customer service
- in house technical support
- superior product quality

CNL is located 15 miles east of Cleveland in Willoughby, Ohio.

For product support or services call us at 800-543-3619 or visit our website at [www.castnylon.com](http://www.castnylon.com)

# NYCAST<sup>®</sup> 12

## Properties

Property	Units	Test Method	Nycast <sup>®</sup> 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 <sup>-5</sup>
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

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 purchaser shall conduct their own test to determine suitability for their intended use.