

ADVANCED INDUSTRIAL

HIGH PERFORMANCE PLASTIC SHAPES // PRECISION CNC MACHINED COMPONENTS



NYCAST® RX & GX

NYCAST® RX (Red) and NYCAST® GX (Gray) are solid lubricant filled nylon 6. Developed after years of research as an alternative to other “solid lubricated” cast nylons, RX and GX give engineers another superior choice from the NYCAST® family of premium grade cast nylons.

NYCAST® RX and GX are specially formulated, self-lubricating grades designed to:

- deliver low coefficient of friction
- superior wear resistance
- high pressure/velocity performance
- low moisture absorption

Typical applications include:

- Wear pads
- Bearings
- Thrust washers
- Bushings
- Gears

Specify RX or GX for applications in industries such as:

- Construction
- Mining
- Pulp & paper processing
- Food processing
- Material handling

AVAILABILITY :

Plates: _” 1/4” thick
Rods: 1” Diam. – 12” Diam.
Discs: From 12” OD to 60” OD
 Thickness starts at 2”
Tubular Bar: 2” OD – 40” OD
Rings & Custom Castings: available 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 \$800K inventory
- excellent customer service
- in house technical support
- superior product quality

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NYCAST RX & GX Properties

Property	Units	Test Method	Nycast R-EX
Specific Gravity		ASTM D792	1.14 - 1.15
Tensile Strength	psi	ASTM D638	9,500 - 11,000
Tensile Elongation	%	ASTM D638	45 - 50
Tensile Modulus	psi	ASTM D638	375,000- 475,000
Compressive Strength	psi	ASTM D695	12,000 - 14,000
Compressive Modulus	psi	ASTM D695	275,000 - 375,000
Flexural Strength	psi	ASTM D790	14,000 - 16,000
Flexural Modulus	psi	ASTM D790	375,000 - 475,000
Shear Strength	psi	ASTM D732	8,000 - 9,000
Notched Izod Impact	ft.lbs./in.	ASTM D256	1.4 - 1.8
Hardness, Rockwell	R	ASTM D785	103
Hardness, Shore D	D	ASTM D2240	78
Melting Point	deg. F	ASTM D789	440 - 460
Coef. Of Linear Thermal Expansion	in./in./deg. F	ASTM D696	5.0×10^{-5}
Deformation Under Load		ASTM D621	.7% - .8%
Deflection Temperature:			
264 psi	deg. F	ASTM D648	179
66 psi	deg. F	ASTM D648	413
Continuous Service Temperature	deg. F		230
Intermittent Service Temperature	deg. F		330
Coefficient of Friction:			
Dynamic			.12
Static			.25 - .35
Water Absorption			
24 Hours	%	ASTM D570	0.4 – 0.5
Saturation	%	ASTM D570	4.0 – 5.0
Dielectric Strength	v/mil.	ASTM D149	TBD
Dielectric Constant		ASTM D150	TBD
60 cycles			
1000 cycles			
100,000 cycles			

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.