

CAST NYLONS LIMITED

Discover the NYCAST® Advantage

NYCAST® 6PA FG

Cast Nylons Limited offers FDA compliant grades. NYCAST 6PA FG can be in direct contact with foods. The material offers high wear resistance and is an ideal substitute for stainless steel wherever lubrication is not a concern. If you need a lubricated material, please look at our NYCAST NYLOIL FG. Cast Nylons offers NYCAST 6 FG in various colors.

- Good wear resistance
- Easy machinability
- Excellent vibration resistance
- Good chemical resistance
- Food compliant
- Resistance to brittleness and deterioration



NYCAST® 6PA FG Product Specifications

Property	Units	ASTM Test Method	NYCAST® 6PA FG
Specific Gravity	g/cm ³	D 792	1.15 - 1.17
Tensile Strength	psi	D 638	10,000 - 13,500
Tensile Elongation	%	D 638	20 - 55
Tensile Modulus	psi	D 638	400,000 - 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	1.5 - 2.5
Hardness Rockwell	R	D 785	110 - 115
Hardness, Shore	D	D 2240	78 - 84
Melting Point	°F	D 3418	430 +/- 10
Coefficient of Linear Thermal Expansion	in./in./°F	D 696	5.0 * 10 ⁻⁵
Deformation Under Load	%	D 621	0.5 - 2.5
Deflection Temperature			
264 psi	°F	D 648	200 - 300
66 psi	°F	D 648	300 - 400
Continuous Service Temperature	°F	-	230
Intermittent Service Temperature	°F	-	330
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
Compliance			
FDA			X
USDA 3A			X
UL 94 HB			X



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ISO 9001:2015



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