



Nylon MD (MoS2)

Nycast 6PA MoS2 Nylon

PROPERTY	UNITS	ASTM TEST METHOD	NYCAST® 6PA Natural NYCAST® 6PA MoS ₂
Specific Gravity		D792	1.15 - 1.17
Tensile Strength	psi	D638	10,000 - 13,500
Tensile Elongation	%	D638	20 - 55
Tensile Modulus	psi	D638	400,000 - 550,000
Compressive Strength	psi	D695	13,500 - 16,000
Compressive Modulus	psi	D695	325,000 - 400,000
Flexural Strength	psi	D790	15,500 - 17,500
Flexural Modulus	psi	D790	420,000 - 500,000
Shear Strength	psi	D732	10,000 - 11,000
Notched Izod Impact	ft.lbs./in.	D256	0.7 - 0.9
Hardness, Rockwell	R	D785	115 - 125
Hardness, Shore	D	D2240	78 - 83
Melting Point	° F	D789	450± 10
Coefficient Of Linear Thermal Expansion	in./in./°F	D696 E831	5.0 x 10 ⁻⁵ (Nat only) 6.1 x 10 ⁻⁵
Deformation Under Load	%	D621	0.5 - 2.5
Deflection Temperature:			
264 psi	° F	D648	200 - 400
66 psi	° F	D648	400 - 430
Continuous Service Temperature	° F		230
Intermittent Service Temperature	° F		330
Coefficient of Friction:			
Dynamic		D1894	0.22
Water Absorption			
24 Hours	%	D570	0.5 - 0.6
Saturation	%	D570	5.0 - 6.0
Dielectric Strength	v/mil.	D149	500 - 600
Dielectric Constant			
60 cycles		D150	3.7
1000 cycles		D150	3.7
100,000 cycles		D150	3.7
Compliance		FDA	Nycast 6PA Natural Nycast 6PA FG Blue
		USDA 3A	Nycast 6PA Natural Nycast 6PA FG Blue
		UL 94 HB	Nycast 6PA Natural

Revised: May 12, 2005 (revised values)