



Typical Properties of

**Nylon MD (Nylatron® GSM)**

Type 6 Polyamide with Molybdenum Disulphide Filler

Process: Cast

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.16
Tensile Strength	D638	psi	11,000
Tensile Modulus	D638	psi	400,000
Elongation	D638	%	30
Flexural Strength	D790	psi	16,000
Flexural Modulus	D790	psi	500,000
Compressive Strength	D695	psi	14,000
Compressive Modulus	D695	psi	400,000
Hardness, Rockwell	D785	--	M80 (R110)
Hardness Durometer	--	--	D85
Izod Impact (notched)	D256	ft. lb of notch	0.5
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.2
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	$5.0 \times 10^{-5}$
Continuous Use Temperature	--	°F	200
Heat Deflection Temperature	D648	°F	200
Glass Transition Temperature	D3418	°F	145
Melting Point	D3418	°F	420
Thermal Conductivity	E1530-11	BTU in/hr ft <sup>2</sup> °F	N / A
Dielectric Strength	D149	Volts/mil	400
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{13}$
Flammability	UL94	--	HB
Water Absorption, 24 hrs.	D570	% by weight	0.6
Water Absorption, Saturation	D570	% by weight	7
Limiting PV (4:1 Safety Factor)	--	--	3,000
K-Factor	--	--	70
FDA Compliance	--	--	No

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.  
All values at 73 F unless otherwise stated.