

DATA SHEET

NYLATRON NSM

Proprietary Solid Lubricant Filled Type 6 Cast Nylon (Polyamide)

PROPERTY	UNITS	VALUE
MECHANICAL		
Specific Gravity	-	1.15
Tensile Strength	psi	11,000
Tensile Modulus	psi	410,000
Elongation (at break)	%	20
Flexural Strength	psi	16,000
Flexural Modulus	psi	475,000
Compressive Strength	psi	14,000
Hardness, Rockwell	-	R110
Coefficient of Friction (Dry vs. Steel)	-	.18
Limiting PV (with 4:1 safety factor)	psi x fpm	15,000
THERMAL		
Coefficient of Linear Thermal Expansion	in/in/F	5.50×10^{-5}
Heat Deflection Temperature (264 psi)	F	200
Glass Transition Temperature	F	145
Continuous Service Temperature	F	200
Thermal Conductivity	BTU/in/hr.ft.F	--
ELECTRICAL		
Dielectric Strength	volts/mil	400
Volume Resistivity	ohm-cm	$>10^{13}$
OTHER		
Water Absorption, Immersion, 24 hrs.	% by wt.	.3
Water Absorption, Immersion, Saturation	% by wt.	7.0

ENGINEERING NOTES:

- * Very high toughness
- * Outwears GSM by up to 10 times
- * Excellent abrasion resistance (SSI - 38)
- * Excellent slip-stick performance