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QUADRANT

Nylon offer extremely good wear resistance, couple with high tensile strength and modulus of elasticity. They also have high impact resistance, a high heat distortion temperature, and resist wear, abrasion, and vibration. In addition, nylons can withstand sustained contact with a wide variety of chemicals, alkalis, dilute acids or oxidizing agents.

ADVANTAGES:

- High Mechanical Strength, Stiffness, Hardness And Toughness · Good Fatigue Resistance
- High Mechanical Damping Ability · Good Sliding Properties · Excellent Wear Resistance
- Good Electrical Insulating Properties · High Resistance Against High Energy Radiation (Gamma And X-rays) · Good Machinability

APPLICATIONS INCLUDE:

- Sleeve And Slide Bearings · Cutting And Chopping Boards · Support And Guide Wheels
- Sleeves For Wheels And Rollers, Pulleys And Pulley-Linings, Cams · Conveyor Rollers · Tension Rollers · Buffer Blocks · Hammer Heads · Scrapers · Gear Wheels · Starwheels · Sprockets · Feed Screws · Seal-Rings · Wear Pads · Insulators

GENERAL PROPERTIES	Test Methods ISO / (IEC)	NYLATRON MC 901 (Cast)	NYLATRON GSM (Cast)	NYLATRON NSM (Cast)	NYLATRON GS (Extruded)
COLOUR		● Blue	● Grey-Black	● Grey	● Grey-Black
PHYSICAL					
Specific Gravity (g/cm ³)	1183	1.15	1.16	1.14	1.15
Water Absorption, 24 hrs (%)	62	0.72	0.76	0.59	0.68
MECHANICAL @ 73°F					
Tensile Stress at Yield (MPa)	527	81	78	76	92
Tensile Strain at Break (%)	527	35	25	25	20
Tensile Modulus of Elasticity (MPa)	527	3,200	3,300	3,100	3,500
Charpy Impact Strength, Un-Notched (kJ/m ²)	179/1eU	No Break	No Break	≥ 100	No Break
Charpy Impact Strength, Notched (kJ/m ²)	179/1eA	3.5	3.5	4	4
IZOD Impact Strength, Notched (kJ/m ²)	180/2A	3.5	3.5	4	4
Rockwell Hardness	2039-2	M 85	M 84	M 81	M 88
THERMAL					
Coeff. of Linear Thermal Expansion (m/[m.k])	-	80 x 10 ⁻⁶	80 x 10 ⁻⁶	80 x 10 ⁻⁶	80 x 10 ⁻⁶
Heat Deflection Temp (°F / °C) @ 1.8 MPa	75	176 / 80	176 / 80	167 / 75	185 / 85
Thermal Conductivity at 23 °C (W/[m.k])	-	0.29	0.3	0.29	0.29
Flammability Rating @ (3mm thickness)	UL-94	HB	HB	HB	HB
ELECTRICAL					
Surface Resistivity (ohms/sq)	{60093}	> 10 ¹³	> 10 ¹³	> 10 ¹³	> 10 ¹³
Volume Resistivity (ohm-cm)	{60093}	> 10 ¹⁴	> 10 ¹⁴	> 10 ¹⁴	> 10 ¹⁴
Dielectric Dissipation Factor Tan δ : at 100 Hz	{60250}	0.012	0.012	0.012	0.013

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.