

METRIC

	Redco Nylon Natural	Redco Nylon Natural Oil	Redco Nylon Blue	Redco Nylon MD	Redco Nylon Oil
Specific Gravity lbs/in ³ (g/cm ³)	0.042 (1.15)	0.041 (1.14)	0.042 (1.15)	0.042 (1.15)	0.041 (1.14)
Tensile Strength PSI (MPa)	10,500 - 12,000 (72-83)	10,000 (69)	10,500 - 12,000 (72-83)	10,500 - 12,000 (72-83)	10,000 (69)
Compressive Strength @ 10% Deflection	15,000 (103)	14,000 - 15,000 (97-103)	10,000 (69)	15,000 (103)	14,000 - 15,000 (97-103)
Elongation @ Break	30 - 40 %	35 - 40 %	30 - 40 %	30 - 40 %	35 - 40 %
Tensile Modulus PSI (MPa)	460,000 (3170)	435,000 (3000)	460,000 (3170)	460,000 (3170)	435,000 (3000)
Tensile Impact @ 73°F ft. lbs./in (J/m)	80 - 130 (4320-7000)	80 - 130 (4320-7000)	80 - 130 (4320-7000)	80 - 130 (4320-7000)	80 - 130 (4320-7000)
Flexural Strength PSI (MPa)	17,000 (117)	13,000 (90)	17,000 (117)	17,000 (117)	13,000 (90)
Flexural Modulus PSI (MPa)	330,000 (2275)	350,000 (2400)	330,000 (2275)	330,000 (2275)	350,000 (2400)
Coefficient of Friction	.36 - .42 (Dry vs. Steel)	.17 - .19 (Dry vs. Steel)	.36 - .42 (Dry vs. Steel)	.36 - .42 (Dry vs. Steel)	.17 - .19 (Dry vs. Steel)
24 Hour H ₂ O	0.50%	0.30%	0.50%	0.50%	0.30%
Equilibrium H ₂ O	1.25 - 4 %	1.0 - 2.8 %	1.25 - 4 %	1.25 - 4 %	1.0 - 2.8 %
Hardness	80 (Scale D)	80 (Scale D)	80 (Scale D)	80 (Scale D)	80 (Scale D)
Coefficient of Thermal Expansion in./in./°F (m/m/°C)	5.5 x 10-5 (9.9 x 10-5)	5.5 x 10-5 (9.9 x 10-5)	5.5 x 10-5 (9.9 x 10-5)	5.5 x 10-5 (9.9 x 10-5)	5.5 x 10-5 (9.9 x 10-5)
Continuous Operating Temp °F (°C)	220 - 250 (104 - 121)	220 - 250 (104 - 121)	220 - 250 (104 - 121)	220 - 250 (104 - 121)	220 - 250 (104 - 121)

We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, whether alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products. For most recent technical information, phone in USA or in Canada.

METRIC

	Redco Nylon MD-Oil	Redco Nylon SL	Tuffkast 010	Tuffkast 015	Tuffkast 025
Specific Gravity lbs/in ³ (g/cm ³)	0.042 (1.15)	0.040 (1.13)	0.040 (1.13)	0.040 (1.13)	0.042 (1.15)
Tensile Strength	10,000 - 12,000 (69-83)	10,000 - 12,000 (69-83)	8,500 - 10,000 (59-69)	8,500 - 10,000 (59-69)	10,500 - 12,000 (72-83)
Compressive Strength @ 10% Deflection PSI (MPa)	14,500 (100)	14,000 - 15,000 (97-103)	12,000 (83)	12,000 (83)	10,000 (69)
Elongation @ Break	30 - 45 %	20 - 45 %	40 - 50 %	40 - 50 %	30 - 40 %
Tensile Modulus PSI (MPa)	450,000 (3100)	460,000 (3170)	390,000 (2690)	390,000 (2690)	460,000 (3172)
Tensile Impact ft. lbs./in. @ 73°F (J/m @ 23°C)	80 - 130 (4320-7000)	80 - 130 (4320-7000)	1.2 - 1.5 (65 - 81)	1.2 - 1.5 (65 - 81)	80 - 130 (4320-7020)
Flexural Strength PSI (MPa)	15,000 (103)	15,500 (107)	16,300 (112)	16,300 (112)	17,000 (117)
Flexural Modulus PSI (MPa)	420,000 (2900)	430,000 (2965)	320,000 (2200)	320,000 (2200)	330,000 (2275)
Coefficient of Friction	.13 - .20 (Dry vs. Steel)	.08 - .14 (Dry vs. Steel)	.15 - .3 (Dry vs. Steel)	.15 - .25 (Dry vs. Steel)	.36 - .42 (Dry vs. Steel)
24 Hour H ₂ O	.2 - .5 %	0.30%	0.35%	.3 - .5 %	0.50%
Equilibrium H ₂ O	1.0 - 2.35 %	1.2 - 3 %	.5 - 2.5 %	0.8 - 2.0 %	1.25 - 4 %
Hardness	80 - 84 (Scale D)	80 - 84 (Scale D)	77 - 78 (Scale D)	77 - 78 (Scale D)	80 (Scale D)
Coefficient of Thermal Expansion in./in./°F (m/m/°C)	5.5 x 10 ⁻⁵ (9.9 x 10 ⁻⁵)	5.5 x 10 ⁻⁵ (9.9 x 10 ⁻⁵)	5.5 x 10 ⁻⁵ (9.9 x 10 ⁻⁵)	5.5 x 10 ⁻⁵ (9.9 x 10 ⁻⁵)	5.5 x 10 ⁻⁵ (9.9 x 10 ⁻⁵)
Continuous Operating Temp °F (°C)	220 - 250 (104 - 121)	220 - 250 (104 - 121)	200 - 230 (93 - 110)	200 - 230 (93 - 110)	200 - 230 (93 - 110)

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