

PROPERTIES OF NYLAFLOW® AND STANDARD NYLON TUBING

	Nylaflow® T (Type 6/6)	Nylaflow® H (Type 6/6)	Nylaflow® LM (Type 11 or 12)	Nylaflow® LM (Type 11 or 12)	Nylaflow® LP (Type 6)	Nylaflow® Tubing (Type 6/6)
Color	Natural	Natural	Natural	Black	Black	Natural
Melting Point	500 ± 5°F	500 ± 5°F	Type11-365 ± 10°F	Type 12-365 ± 10°F	420 ± 13°F	500 ± 5°F
Water Absorption at Equilibrium (%) at Saturation (%)	2.50 8.0	2.50 8.0	.9 1.9	.9 1.9	3.50 11.0	2.50 8.0
Suggest Temp. Range (°F)	-65 to +150	-65 to +150	-80 to +200	-80 to +200	-40 to +150	-65 to +150
Light Stabilized	No	No	No	Yes	Yes	No
Hoop Stress at 73°F Bone Dry (psi)	7,500	7,500	2,500	2,500	6,000	7,500
Hoop Stress at 73°F 50% R.H. (psi)	4,500	4,500	2,000	2,000	2,600	4,500
Hoop Stress at 73°F Full Saturation (psi)	3,100	3,100	1,850	1,850	2,100	3,100
Material's Flexural Elastic Modulus at 73°F, 50% R.H. (psi)	175,000 (conditioned)	175,000 (conditioned)	105,000	105,000	130,000	175,000 (conditioned)
Operating Pressure at 73°F, 50% R.H. (psi)	250	625	250	250	175	Not Pressure Rated
Bursting Pressure at 73°F 50% R.H. (psi)	1,000 Minimum	2,500 Minimum	1,000 Minimum	1,000 Minimum	700 Minimum	
Important Facts	Moderate cost. General Purpose nylon. Highest strength. Stiffest of all nylons. FDA compliant. Meets 3A Sanitary Standards. Carried in stock.	Moderate cost. General Purpose nylon. Highest strength. Stiffest of all nylons. FDA compliant. Meets 3A Sanitary Standards. Carried in stock.	Premium material. Excellent Flexibility. Best chemical resistance including resistance to ZnCl ₂ : (zinc chloride). Lowest moisture pickup. Wide temperature range usage. Carried in stock.	Same as Natural except light stability improved.	General Purpose. Light stability.	Moderate Cost. General purpose nylon. Highest strength. Stiffest of all nylons. Meets 3A Sanitary Standards.
Typical Applications duit,	Air lines, grease lines, vacuum lines, hydraulic lines, high pressure gases.	Air lines, grease lines, vacuum lines, hydraulic lines, high pressure gases.	Automotive fuel lines, lubrication lines, vacuum lines, air lines.	Automotive Fuel lines, lubrication lines, vacuum lines, air lines.	General purpose tubing. Excellent for farm machinery.	Mechanical applications, such as con small sleeve bearings, busings, insulators.
Chemical Resistance at 73°F						
Acids	Good to pH-5	Good to pH-5	Good to pH-5	Good to pH-5	Good to pH-5	Good to pH-5
Alkalies	Good to pH-11	Good to pH-11	Good to pH-11	Good to pH-11	Good to pH-11	Good to pH-11
Hydrocarbons-aromatic	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Hydrocarbons-aliphatic	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Ketones	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Ethers	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohols	Good	Good	Good	Good	Good	Good
Salts, neutral	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Freons	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Sunlight	Fair	Fair	Fair	Good	Good	Fair

Notes: Formula for calculating hoop stress of any nylon tube:

$$S = P(d+t) / 2t$$

S=hoop stress strength (psi)

d=inside diameter of tube (inches)

P=burst strength (psi)

t=wall thickness of tube (inches)