

# Tygon<sup>®</sup> A-60-G Tubing

## HIGH-PERFORMANCE CHEMICAL DISPENSING ALTERNATIVE TO RUBBER TUBING

### Designed to Resist Hydrocarbons

Specially formulated for chemical dispensing, Tygon<sup>®</sup> A-60-G tubing outperforms neoprene, EPDM and other general-purpose tubing in test after test, application after application. It will not weaken or crack after years of exposure to heat and ozone, providing longer pump life in industrial and institutional cleaning-chemical dispensing applications.

Engineered for outstanding performance and on-the-job reliability, Tygon<sup>®</sup> A-60-G tubing handles temperatures ranging from -75°F (-60°C) to 75°F (135°C), allowing the use of one material within a broad range of temperatures. It is heat sealable and can be joined without fittings. It also offers excellent resistance to inorganic fluids (acids and bases).

### Unequaled Life in Peristaltic Pump Applications

Peristaltic pumps are used in a wide range of markets and applications, including industrial and institutional cleaning-chemical dispensing. The universal requirement common to these applications is the ability of the tubing to withstand the constant high flexural fatigue exerted by the pump rollers.

Tygon<sup>®</sup> A-60-G tubing outlasts and outperforms virtually all other general service tubing in peristaltic pump applications due to its high flexural fatigue strength.

### Ideal for Use in Vacuum Systems

Tygon<sup>®</sup> A-60-G tubing is available in standard vacuum sizes that will withstand a full vacuum (29.9" [759 mm] of mercury) at 73°F (23°C). Unlike typical rubber vacuum tubing, Tygon<sup>®</sup> tubing resists the cracking and aging that are frequent causes of vacuum tubing failure.



## Features and Benefits

- Superior weathering
- Abrasion resistant
- Outstanding flexural fatigue resistance
- Wide temperature range (-75°F to 275°F)
- Low gas permeability versus rubber tubing
- Ozone\* and UV light resistant  
\*300 pphm

## Typical Applications

- Soap and disinfectant dispensing
- Cleaning chemical transfer
- Caustic chemical dispensing
- Plating and etching chemicals
- Glass and window wash systems
- Vacuum pumps



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Part Number	ID	OD	Wall Thickness	Length	Min. Bend Radius	Max. Working Pressure		Vacuum Rating	
	(in.)	(in.)	(in.)	(ft.)	(in.)	73°F (psi)*	180°F (psi)*	inHg at 73°F	inHg at 180°F
AFL00003	1/16	3/16	1/16	50	1/4	34	21	29.9	29.9
AFL00007	1/8	1/4	1/16	50	1/2	19	12	29.9	29.9
AFL00008**	1/8	3/8	1/8	50	1/2	34	21	29.9	29.9
AFL00012	3/16	5/16	1/16	50	3/4	13	8	29.9	29.9
AFL00013	3/16	3/8	3/32	50	1/2	19	12	29.9	29.9
AFL00015**	3/16	9/16	3/16	50	1/4	34	21	29.9	29.9
AFL00017	1/4	3/8	1/16	50	7/8	10	6	29.9	15.8
AFL00018	1/4	7/16	3/32	50	3/4	15	9	29.9	29.9
AFL00019	1/4	1/2	1/8	50	3/4	19	12	29.9	29.9
AFL00020**	1/4	5/8	3/16	50	1/2	26	16	29.9	29.9
AFL00022	5/16	7/16	1/16	50	1-1/4	8	5	20.2	10.1
AFL00023	5/16	1/2	3/32	50	1	12	7	29.9	25.0
AFL00026**	5/16	13/16	1/4	50	1/2	28	17	29.9	29.9
AFL00027	3/8	1/2	1/16	50	1-3/8	7	4	14.1	7.0
AFL00028	3/8	9/16	3/32	50	1-1/2	10	6	29.9	15.0
AFL00029	3/8	5/8	1/8	50	1-1/8	13	8	29.9	27.7
AFL00032	7/16	9/16	1/16	50	2-1/4	6	4	5.0	0.0
AFL00036	1/2	5/8	1/16	50	3	6	3	15.0	0.0
AFL00037	1/2	11/16	3/32	50	2-1/4	8	5	20.0	10.0
AFL00038	1/2	3/4	1/8	50	1-1/8	10	6	29.6	15.6
AFL00045	5/8	13/16	3/32	50	3-1/4	7	4	10.0	5.0
AFL00046	5/8	7/8	1/8	50	2-3/4	8	5	20.0	9.9
AFL00053	3/4	1	1/8	50	3-1/2	7	4	13.9	6.9
AFL00062	1	1-1/4	1/8	50	5	6	3	5.0	5.0

\*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599

\*\*Vacuum tubing sizes

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, Shore A, 15s	D2240	61
Tensile Strength, psi (MPa)	D412	1,000 (6.9)
Ultimate Elongation, %	D412	375
Tear Resistance, lb-f/in (kN/m)	D1004	120 (21.0)
Specific Gravity	D792	0.98
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.30
Compression Set Constant Deflection, % at 158°F (70°C) for 22hrs.	D395 Method B	27
Maximum Recommended Operating Temp., °F (°C)	—	275 (135)
Tensile Modulus, at 100% Elongation, psi (MPa)	D412	410 (2.8)
at 300% Elongation, psi (MPa)		800 (5.5)
Tensile Set, at 75% Elongation	D412	47
Color	—	Black
Brittleness by Impact Temp., °F (°C)	D746	-75 (-60)
Dielectric Strength, v/mil (kV/mm)	D149	535 (21.1)

Unless otherwise noted, all tests were conducted at room temperature 73°F (23°C). Values shown were determined on 0.075" (1.905 mm) thick extruded strip or 0.075" (1.905 mm) thick molded ASTM plaques or molded ASTM durometer buttons.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressure, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

**TYGON® A-60-G TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.**



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