

TYGON®
Excellence By Design





Tygon® A-60-C, A-60-C IB

Long-Life, Temperature-Resistant Tubing for Cleaning Chemical Dispensing

Formulated to withstand extreme temperatures from -75° F to 275° F (-59° C to 135° C), Tygon A-60-C tubing will not crack or deteriorate when used in demanding cleaning chemical dispensing applications. Extremely flexible, it resists kinks and retains its shape while installing quickly and easily. Its excellent flexural fatigue resistance makes it the absolute best choice for use in peristaltic pumps often found in dispensing equipment. Repeatedly autoclavable, it can be steam cleaned in place, eliminating the need for frequent tubing replacement. When harsh sanitizing solutions are used, it exhibits exceptional chemical resistance and is entirely unaffected by a wide variety of cleaning solutions.

Simplifies Cleaning and Sterilization

Tygon A-60-C tubing is ideal for use in clean-in-place and steam-in-place cleaning and sterilization systems. It is compatible with virtually all commercial cleaners and sanitizers and can be repeatedly autoclaved for up to five cycle times without affecting its overall service life.

Now Available to Withstand Elevated Pressure

Certain applications require using pressures that only reinforced tubing can withstand. For those applications, Tygon A-60-C IB tubing is now available. It has the same desirable properties as Tygon A-60-C tubing with an additional reinforcement embedded within its walls to withstand elevated pressure.

Excellent Chemical Resistance

Tygon A-60-C tubing has excellent acid and alkali resistance, and is compatible with numerous oxidizing agents such as peroxide, hypochlorite and ozone. For the complete listing of common chemicals and their relative effect on Tygon A-60-C tubing, please refer to www.processsystems.saint-gobain.com.

Features and Benefits

- Long flex life in peristaltic pumps
- Temperature resistant from -75° F to 275° F (-59° C to 135° C)
- Compatible with virtually all common sanitizers and cleaners
- Ozone and UV light resistant
- Repeatedly autoclavable
- Chemically compatible with a wide range of cleaners

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www.processsystems.saint-gobain.com

Tygon A-60-C

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
AZT00003	1/16	3/16	1/16	50	1/4	34	21	29.9	29.9
AZT00007	1/8	1/4	1/16	50	1/2	19	12	29.9	29.9
AZT00012	3/16	5/16	1/16	50	3/4	13	8	29.9	23.0
AZT00017	1/4	3/8	1/16	50	1-1/4	10	6	26.0	13.0
AZT00019	1/4	1/2	1/8	50	3/4	19**	12**	29.9	29.9
AZT00022	5/16	7/16	1/16	50	1-1/2	8	5	17.0	8.0
AZT00027	3/8	1/2	1/16	50	2-1/4	7	4	11.0	5.0
AZT00029	3/8	5/8	1/8	50	1-1/4	13**	8**	29.9	23.0
AZT00038	1/2	3/4	1/8	50	2	10**	6**	26.0	13.0
AZT00046	5/8	7/8	1/8	50	3-1/4	8**	5**	17.0	8.0
AZT00053	3/4	1	1/8	50	4	7**	4**	11.0	5.0

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599
**Available in a reinforced construction for higher pressures

Tygon A-60-C IB

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
AST00019	1/4	1/2	1/8	50	3/4	125	70	29.9	29.9
AST00029	3/8	5/8	1/8	50	1-1/4	105	65	29.9	20.0
AST00038	1/2	3/4	1/8	50	2-1/4	100	60	25.0	15.0
AST00046	5/8	7/8	1/8	50	2-1/2	95	55	20.0	10.0
AST00054	3/4	1-1/16	5/32	50	3-1/4	85	45	10.0	5.0
AST00064	1	1-3/8	3/16	50	5	75	40	12.0	7.0

*Working pressures are calculated at a 1:4 ratio relative to burst pressure using ASTM D1599

Typical Physical Properties

Property	ASTM Method	A-60-C Value or Rating	A-60-C IB Value or Rating
Durometer Hardness, Shore A, 15s	D2240-03	61	61
Tensile Strength, psi (MPa)	D412-98	1,000 (6.9)	1,000 (6.9)
Ultimate Elongation, %	D412-98	375	375
Tear Resistance, lb-f/in (kN/m)	D1004-03	120 (21.0)	120 (21.0)
Specific Gravity	D792-00	0.98	0.98
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570-98	0.30	0.30
Compression Set Constant Deflection, % at 158°F (70°C) for 22hrs.	D395-03 Method B	27	30
Maximum Recommended Operating Temp., °F (°C)	—	275 (135)	275 (135)
Tensile Modulus, at 100% Elongation, psi (MPa) at 300% Elongation, psi (MPa)	D412-98	410 (2.8) 800 (5.5)	410 (2.8) 800 (5.5)
Tensile Set, at 75% Elongation	D412-98	47	47
Color	—	Cream	Cream
Brittleness by Impact Temp., °F (°C)	D746-98	-75 (-60)	-75 (-60)
Dielectric Strength, v/mil (kV/mm)	D149-97	535 (21.1)	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. Size of tubing tested is 1/8" ID x 1/4" OD.

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.

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