



Reinforced to provide increased pressure capability, Tygon® B-44-4X I.B. tubing is the most flexible reinforced tubing available.

## Versatility Provides the Solution to Many Applications

Tygon® B-44-4X I.B. Pressure Tubing can be used to transport many types of fluids in applications ranging from those regulated by FDA guidelines to industrial and laboratory applications involving virtually all non-solvent based chemicals.

## Flexibility to Deal with the “Twists and Turns”

Lightweight and easy to handle, Tygon® B-44-4X I.B. Pressure Tubing goes into service quickly. It readily curves around corners and obstructions, requiring a minimum of couplings and fittings. Its flexibility can save up to one-third the footage and much of the labor required to install rigid stainless steel, glass tubing or piping.

## Reduces the Risk of Bacterial Contamination

Tygon® B-44-4X I.B. tubing's smooth non-porous inner bore resists particle entrapment and resultant bacterial growth. Its excellent non-wetting properties facilitate complete drainage and increase the overall effectiveness of cleaning, making it the ideal choice in food, beverage, dairy, and other bacterial sensitive applications. Virtually taste and odor free Tygon® B-44-4X I.B. Pressure Tubing fully complies with FDA 175.300 criteria and the 3-A Sanitary Standards for food contact applications as well as being listed under the NSF Standard 51. Custom antimicrobial version available upon request.

## Ideal for Use with ReSeal® Reusable Sanitary Fittings

By combining Tygon® B-44-4X I.B. tubing with ReSeal® Reusable Fittings, complete assemblies can be constructed, providing a contamination free environment that maintains the purity of fluids being transferred. ReSeal® assemblies are easy to install and can increase manufacturing efficiency by providing a fluid path that is repeatedly sterilizable using many conventional clean-in-place methods.

## Pressure Formulation B-44-4X I.B.

*Unique Flexibility Permits Use Where Other Reinforced Tubings Kink and Collapse*

### Features / Benefits

- **Handles Four Times the Pressure of Non-Reinforced Tubing**
- **Smooth, Non-Porous Bore Resists Particle Entrapment**
- **Clear Wall Enables Visualization of Fluid Flow**
- **Connects Easily to ReSeal® Sanitary Fittings**
- **Meets FDA, 3-A and NSF Criteria**

### Typical Applications Include:

- Cosmetic Production
- Food and Dairy Processing
- Beverage Dispensing
- Pharmaceutical Filling
- Water Purification Systems
- Printing Equipment
- Coolant Lines
- Chemical Transfer
- Instrumentation and Air Supply

# TYGON® Pressure Formulation B-44-4X I.B.

## Tygon® B-44-4X I.B. Manufactured Sizes and Pressures

Norton Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Length (feet)	Max. Bend Radius (inches)	Max. Working Pressure		Vacuum Rating In. of Mercury	
						at 73°F (PSI)*	at 160°F (PSI)*	at 73°F (PSI)*	at 160°F (PSI)*
ADA00018	1/4	7/16	3/32	50	1-1/2	250	90	29.9	29.9
ADA00029	3/8	5/8	1/8	50	1-1/8	170	90	29.9	25.0
ADA00038	1/2	3/4	1/8	50	2-1/8	200	95	29.9	10.0
ADA00046	5/8	7/8	1/8	50	2-3/8	165	105	25.0	10.0
ADA00053	3/4	1	1/8	50	3-1/4	145	85	20.0	5.0
ADA00064	1	1-3/8	3/16	50	3-3/4	100	60	20.0	5.0
ADA00070	1-1/4	1-5/8	3/16	50	5-1/2	85	55	10.0	3.0
ADA00074	1-1/2	2	1/4	50	5-7/8	75	45	10.0	2.0
ADA05074	1-1/2	2	1/4	20	5-7/8	75	45	10.0	2.0
ADA06074	1-1/2	2	1/4	10	5-7/8	75	45	10.0	2.0
ADA05079	2	2-3/4	3/8	20	6-7/8	60	40	25.0	10.0
ADA06079	2	2-3/4	3/8	10	6-7/8	60	40	25.0	10.0
ADA05086	3	3-3/4	3/8	20	13-1/4	40	25	10.0	1.0
ADA06086	3	3-3/4	3/8	10	13-1/4	40	25	10.0	1.0

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

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 pressures 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® B-44-4X I.B. Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240-02	65
Color	-	Clear
Tensile Strength psi (MPa)	D412-98	2,100 (14.5)
Ultimate Elongation, %	D412-98	450
Tear Resistance lb-f/inch (kN/m)	D1004-94	200 (35)
Specific Gravity	D792-00	1.21
Water Absorption, % 24 hrs. @ 23°C	D570-98	0.15
Compression Set Constant Deflection, % @158°F (70°C) for 22 hrs.	D395-01 Method B	62
Brittleness By Impact Temp., °F (°C)	D746-98	-47 (-44)
Maximum Recommended Operating Temp., °F (°C)	-	165 (74)
Dielectric Strength, v/mil (kV/mm)	D149-97	517 (20.3)
Tensile Modulus, @ 100% Elongation, psi (MPa)	D412-98	1,150 (7.9)
Tensile Set, %	D412-98	78

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

### North America

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TYGON® B-44-4X I.B. TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

**IMPORTANT:** It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

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