

TYGON® Food, Milk and Dairy Tubing



With its smooth non-porous bore, Tygon® Food, Milk and Dairy Tubing helps ensure a bacterial-free fluid path in a wide variety of food processing applications.

Preferred Tubing of the Food Industry

Producers of food, milk and dairy products insist upon Tygon® Food, Milk and Dairy Tubing for dependable performance in countless filling, draining, transfer and processing applications. Its smooth, non-porous bore inhibits particle entrapment, promoting a sanitary fluid path by minimizing potential for bacterial growth. It has outstanding resistance to harsh alkaline cleaners and is equally unaffected by commonly used sanitizers.

Lightweight and Flexible

Light in weight and easy to handle, Tygon® Food, Milk and Dairy Tubing can be put into service quickly. It readily bends to accommodate abrupt 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 or plastic piping.

Meets FDA, NSF and 3-A Criteria

Non-toxic, **taste-free** and odor-free, Tygon® Food, Milk and Dairy Tubing meets applicable regulatory standards for contact with food products. Tygon® Food, Milk and Dairy Tubing is NSF listed under Standard 51. This standard covers plastic materials and components for use in food and beverage processing and dispensing equipment. It also meets FDA 21 CFR, 175.300 criteria and 3-A Plastics Standard Criteria for use in handling foods and beverages.

Available in Large Bore Sizes

Tygon® Food, Milk and Dairy Tubing is available in large bore sizes up to 6" inside diameter, making it a flexible alternative to rigid piping systems. It offers complete clarity for positive visual inspection and flow control.

Reinforced Tubing Available for Elevated Pressure

A special construction of Tygon® Food, Milk and Dairy Tubing is also available to meet applications involving elevated pressure. In these instances, select Tygon® Pressure Tubing, Formulation B-44-4X I.B.

Tygon® Pressure Tubing has the identical product features found in Tygon® Food, Milk and Dairy Tubing, with reinforcement added to withstand up to four times the pressure.

FORMULATION B-44-4X

*The preferred clear,
flexible tubing
for food processing
applications*

Features/Benefits

- Smooth, non-porous bore will not trap particulates or promote bacteria growth
- Compatible with foods containing a high oil content
- Resistant to harsh alkaline cleaners and sanitizers
- Excellent alternative to rigid piping systems
- Meets FDA, 3-A and NSF criteria

Typical Applications

- Aseptic filling
- Condiment dispensing
- Dairy processing
- Vitamin and flavor concentrate systems
- Soft-serve dispensing

Tygon® B-44-4X Tubing Manufactured Sizes and Pressures

Saint-Gobain Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Length (feet)	Minimum Bend Radius (inches)	Max. Working Pressure at 73°F (psi)*	Vacuum Rating In. of Mercury at 73°F
AAA00001	1/32	3/32	1/32	50	1/8	100	29.9
AAA00002	1/16	1/8	1/32	50	1/4	60	29.9
AAA00003	1/16	3/16	1/16	50	1/8	100	29.9
AAA00004	3/32	5/32	1/32	50	3/8	43	29.9
AAA00006	1/8	3/16	1/32	50	1/2	34	25.0
AAA00007	1/8	1/4	1/16	50	3/8	60	29.9
AAA00009	5/32	7/32	1/32	50	3/4	28	16.0
AAA00010	5/32	9/32	1/16	50	1/2	50	29.9
AAA00011	3/16	1/4	1/32	50	1	25	11.0
AAA00012	3/16	5/16	1/16	50	5/8	43	29.9
AAA00013**	3/16	3/8	3/32	50	1/2	60	29.9
AAA00017	1/4	3/8	1/16	50	1	34	25.0
AAA00018	1/4	7/16	3/32	50	3/4	47	29.9
AAA00019	1/4	1/2	1/8	50	5/8	60	29.9
AAA00022	5/16	7/16	1/16	50	1-3/8	28	16.0
AAA00023	5/16	1/2	3/32	50	1	40	29.9
AAA00024	5/16	9/16	1/8	50	7/8	50	29.9
AAA00025**	5/16	5/8	5/32	50	3/4	60	29.9
AAA00027	3/8	1/2	1/16	50	1-3/4	25	11.0
AAA00028	3/8	9/16	3/32	50	1-3/8	34	25.0
AAA00029	3/8	5/8	1/8	50	1-1/8	44	29.9
AAA00032**	7/16	9/16	1/16	50	2-1/4	22	8.0
AAA00033**	7/16	5/8	3/32	50	1-3/4	30	19.0
AAA00036	1/2	5/8	1/16	50	2-7/8	19	6.0
AAA00037	1/2	11/16	3/32	50	2-1/8	27	14.0
AAA00038	1/2	3/4	1/8	50	1-3/4	34	25.0
AAA00039	1/2	13/16	5/32	50	1-1/2	40	29.9
AAA00041**	9/16	3/4	3/32	50	2-1/2	25	11.0
AAA00045	5/8	13/16	3/32	50	3	23	9.0
AAA00046	5/8	7/8	1/8	50	2-3/8	29	16.0
AAA00047	5/8	15/16	5/32	50	2	35	26.0
AAA00053	3/4	1	1/8	50	3-1/4	25	11.0
AAA00054	3/4	1-1/16	5/32	50	2-3/4	30	18.0
AAA00055	3/4	1-1/8	3/16	50	2-3/8	34	26.0
AAA00057	3/4	1-1/4	1/4	50	2	43	29.9
AAA00059	7/8	1-1/8	1/8	50	4-1/8	22	8.0
AAA00062	1	1-1/4	1/8	50	5-1/8	20	6.0
AAA00063	1	1-5/16	5/32	50	4-3/8	24	10.0
AAA00064	1	1-3/8	3/16	50	3-3/4	27	14.0
AAA00065	1	1-1/2	1/4	50	3	34	25.0
AAA00067	1-1/8	1-3/8	1/8	50	6-1/4	18	5.0
AAA00070	1-1/4	1-5/8	3/16	50	5-1/2	23	9.0
AAA00073**	1-1/2	1-7/8	3/16	50	7-1/4	19	6.0
AAA00074	1-1/2	2	1/4	50	5-7/8	25	11.0
AAA00078	2	2-1/2	1/4	50	9-3/8	19	6.0
AAA05078	2	2-1/2	1/4	20	9-3/8	19	6.0
AAA05079**	2	2-3/4	3/8	20	6-7/8	27	14.0
AAA05080**	2	3	1/2	20	5-1/2	34	25.0
AAA05082	2-1/2	3	1/4	20	13-3/8	16	4.0
AAA05083**	2-1/2	3-1/4	3/8	20	10	23	9.0
AAA05085	3	3-1/2	1/4	20	18	14	2.0
AAA05086**	3	3-3/4	3/8	20	13-1/4	19	6.0
AAA05088**	4	5	1/2	20	17	19	6.0
AAA06088	4	5	1/2	10	17	19	6.0
AAA05318**	6	6-1/2	1/4	20	55-3/8	8	0.5
AAA06318**	6	6-1/2	1/4	10	55-3/8	8	0.5

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

** Made to order, minimums will apply.

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® is a registered trademark.

Saint-Gobain Performance Plastics

2664 Gilchrist Road
Akron, OH 44305
Tel: 800-798-1554
Tel: (330) 798-9240
Fax: (330) 798-6968



www.tygon.com

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.

For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective or at our option to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse or inability to use this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.

Saint-Gobain Performance Plastics Corporation assumes no obligations or liability for any advice furnished by it, or for results obtained with respect to those products. All such advice is given and accepted at the buyer's risk.

Tygon® B-44-4X Tubing Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240	65
Color	—	Clear
Tensile Strength psi (MPa)	D412	2,100 (14.5)
Ultimate Elongation, %	D412	450
Tear Resistance lb-f/inch (kN/m)	D1004	200 (35)
Specific Gravity	D792	1.21
Water Absorption, % 24 hrs. @ 23°C	D570	0.15
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs.	D395 Method B	62
Brittleness By Impact Temp., °F (°C)	D746	-47 (-44)
Maximum Recommended Operating Temp., °F (°C)	—	165 (74)
Dielectric Strength, v/mil (kV/mm)	D149	518 (20.4)
Tensile Modulus, @ 200% Elongation, psi (MPa)	D412	1,760 (12.1)
Tensile Set, %	D412	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.

TYGON® FOOD, MILK AND DAIRY TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL