

# TYGON B-44-3

*The only choice for phthalate-free flexible tubing*

## Clear, flexible tubing for beverage transfer.

Tygon S3™ B-44-3 from Saint-Gobain Performance Plastics is now phthalate-free. Saint-Gobain is proud to be among the first companies to offer sustainable flexible tubing products. The bio-based Tygon S3™ line combines the high performance standards customers demand with an eco-friendly tubing design.

## Versatile, High-Performance Tubing

Tygon S3™ B-44-3 is specially formulated for transferring a wide variety of beverages including soft drinks, fruit juices, flavored teas and bottled water.\* In virtually all cases, Tygon S3™ B-44-3 will not affect the taste or odor of products transferred through it, while its excellent non-wetting properties facilitate complete drainage and permit simple flush-cleaning.

Many of the unique properties inherent to Tygon S3™ B-44-3 also apply to a wide variety of complex applications, ranging from fine cosmetic production to the dispensing of water-based printing inks found in the publishing industry. The versatility and proven performance of Tygon S3™ B-44-3 have made it today's most widely specified clear, flexible plastic tubing.

## Lightweight and Flexible

Light in weight and easy to handle, Tygon S3™ B-44-3 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.

## Clear as Glass

The glass-like clarity of Tygon S3™ B-44-3 allows the user to see product flow through it, so visual monitoring of flow is easy. This is particularly helpful in controlling or adjusting flow during processing.

## Different Sizes Available

Tygon S3™ B-44-3 is available in sizes ranging from 1,587mm I.D. to 88,9mm O.D. – all through our nationwide network of general plastics distributors. Leave it to Saint-Gobain Performance Plastics to make it convenient to select the right tubing for your application.

## Regulatory Standards

Tygon S3™ complies with FDA, NSF, 3-A, Japan Food Sanitation Law # 370/1959, REACH, 1935/2004/EC and 10/2011/EU for many foods and beverages. Tygon S3™ tubing products do not contain chemicals listed in California's Proposition 65.

\* For complete compliance information and appropriate use instructions, please refer to the detailed document of compliance. The complete compliance information and use instructions can be found at [www.TygonS3.com](http://www.TygonS3.com).



## Tygon S3™ B-44-3 Features/Benefits

- Clear as glass for easy visual monitoring of flow
- Lightweight and flexible for easy, quick installation
- Broad chemical resistance
- Non-wetting properties allow easy cleaning and complete drainage
- Contains no BPA or phthalates

## Typical Applications\*

- Beverage dispensing
- Bag-in-box
- Dairy processing
- Food dispensing
- Beverage transfer

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 Sec	D2240	66
Tensile Strength, MPa	D412	15,2
Ultimate Elongation, %	D412	390
Tear Resistance, kN/m	D1004	43,8
Specific Gravity	D792	1,21
Water Absorption, % 24 hrs. @ 23°C	D570	0,22
Compression Set Constant Deflection, % @ 70°C for 22 hrs.	D395 Method B	59
Brittleness Temp., °C	D746	-36
Maximum Recommended Operating Temp. °C	-	74
Tensile Stress @ 200% Elongation, MPa	-	9,5
Tensile Set, %	D412	57
Color	-	Clear

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 S3™ B-44-3 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.**

## Tygon S3™ B-44-3

Saint-Gobain Part Number	I.D. (mm)	O.D. (mm)	Minimum Bend Radius (mm)	Max. Working Pressure at 23°C (bar)	Vacuum Rating mm of Mercury at 23°C
AAB00002	1,59	3,18	6,35	4,1	760
AAB00003	1,59	4,76	3,18	6,9	760
AAB00004	2,38	3,97	9,53	3,0	760
AAB00005	2,38	5,56	6,35	5,1	760
AAB00006	3,18	4,76	12,7	2,3	635
AAB00007	3,18	6,35	9,53	4,1	760
AAB00009	3,97	5,56	19,05	1,9	406
AAB00010	3,97	7,14	12,7	3,4	760
AAB00011	4,76	6,35	25,4	1,7	279
AAB00012	4,76	7,94	15,88	3,0	760
AAB00013	4,76	9,53	12,7	4,1	760
AAB00014	4,76	11,11	9,53	5,1	760
AAB00016	6,35	7,94	41,28	1,3	152
AAB00017	6,35	9,53	25,4	2,3	635
AAB00018	6,35	11,11	19,05	3,2	760
AAB00019	6,35	12,7	15,88	4,1	760
AAB00022	7,94	11,11	34,93	1,9	406
AAB00023	7,94	12,7	25,4	2,8	760
AAB00024	7,94	14,29	22,23	3,4	760
AAB00027	9,53	12,7	44,45	1,7	279
AAB00028	9,53	14,29	34,93	2,3	635
AAB00029	9,53	15,88	28,58	3,0	760
AAB00034	11,11	17,46	34,93	2,5	760
AAB00036	12,7	15,88	73,03	1,3	152
AAB00037	12,7	17,46	53,98	1,9	355
AAB00038	12,7	19,05	44,45	2,3	635
AAB00046	15,88	22,23	60,33	2,0	406
AAB00051	17,46	23,81	73,03	1,9	330
AAB00053	19,05	25,4	82,55	1,7	279
AAB00059	22,23	28,58	104,78	1,5	203
AAB00062	25,4	31,75	130,18	1,4	152
AAB00064	25,4	34,93	95,25	1,9	355
AAB00065	25,4	38,1	76,2	2,3	2127
AAB00069	31,75	38,1	187,33	1,1	101
AAB00070	31,75	41,28	139,7	1,6	229
AAB00071	31,75	44,45	111,13	1,9	406
AAB00073	38,1	47,63	184,15	1,3	152
AAB00074	38,1	50,8	149,23	1,7	279
AAB00076	44,45	57,15	190,5	1,5	203
AAB00078	50,8	63,5	238,13	1,3	152
AAB05080	50,8	76,2	139,7	2,3	635
AAB05081	57,15	69,85	285,75	1,2	127

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

Unless otherwise noted, all tests were conducted at room temperature (23°C). Values shown were determined on 1,905mm thick extruded strip or 1,905mm thick molded ASTM plaques or molded ASTM durometer buttons.



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**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.

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