

Tygon® SPT-3350

Silicone Tubing for Food and Beverage Transfer

The inner surface of Tygon® SPT-3350 silicone tubing has been designed to reduce the risk of particle entrapment and microscopic build-up during fluid transfer. In-house analysis of the inner surface of Tygon® SPT-3350 silicone tubing compared to other silicone tubing shows that it is up to three times smoother.

A smoother fluid path also helps to facilitate complete sanitation of a fluid transfer system. Even in repeat use applications, Tygon® SPT-3350 silicone tubing may prevent residue build-up, aiding in complete cleaning and sterilization.

Additionally, the smooth inner surface of the Tygon® SPT-3350 silicone tubing improves fluid flow characteristics by reducing surface area.

Lower Extractable

Tygon® SPT-3350 silicone tubing is produced from a platinum curing process to meet the most demanding requirements of food and beverage sanitary standards.

In-house extractability tests have shown that Tygon® SPT-3350 silicone tubing has a low extractable content. Lower extractable help to maintain the integrity of the transported food and beverage media.

Tygon® SPT-3350 tubing meets 3-A Sanitary Standard No. 18-01, FDA 21 CFR 175.300 and NSF 51 certification. Tygon® SPT-3350 silicone tubing has a Master File with the U.S. Food and Drug Administration.



Features and Benefits

- Ultra-smooth inner bore reduces potential for particle entrapment
- Minimal extractable help maintain fluid integrity
- Excellent fluid flow characteristics
- Complete inventory of standard sizes available, including metric sizes

Typical Applications

- Food and beverage dispensing

Regulatory Compliance

- 3-A Sanitary Standard No. 18-01
- FDA 21 CFR 175.300
- NSF 51 certification

Tygon® SPT-3350

Part Number	ID	OD	Wall Thickness	Length	Min. Bend Radius	Max. Working Pressure		Vacuum Rating	
	(in.)	(in.)	(in.)	(ft.)	(in.)	73°F (psi)*	320°F (psi)*	inHg at 73°F	inHg at 320°F
ABW01NSF	1/32	3/32	1/32	50	1/8	22	21	29.9	29.9
ABW02NSF	1/16	1/8	1/32	50	1/4	14	13	29.9	29.9
ABW03NSF	1/16	3/16	1/16	50	1/4	22	21	29.9	29.9
ABW04NSF	3/32	5/32	1/32	50	1/4	11	10	29.9	29.9
ABW05NSF	3/32	7/32	1/16	50	1/4	18	16	29.9	29.9
ABW06NSF	1/8	3/16	1/32	50	3/8	9	8	20.0	15.0
ABW07NSF	1/8	1/4	1/16	50	1/2	14	13	29.9	29.9
ABW09NSF	5/32	7/32	1/32	50	3/4	7	6	10.0	10.0
ABW11NSF	3/16	1/4	1/32	50	1	7	6	5.0	5.0
ABW12NSF	3/16	5/16	1/16	50	1/2	11	10	25.0	25.0
ABW13NSF	3/16	3/8	3/32	50	3/8	14	13	29.9	29.9
ABW14NSF	3/16	7/16	1/8	50	3/8	18	16	29.9	29.9
ABW16NSF	1/4	5/16	1/32	50	1-1/2	5	4	1.0	1.0
ABW17NSF	1/4	3/8	1/16	50	3/4	9	8	15.0	15.0
ABW18NSF	1/4	7/16	3/32	50	5/8	12	11	29.9	29.9
ABW19NSF	1/4	1/2	1/8	50	5/8	14	13	29.9	29.9
ABW22NSF	5/16	7/16	1/16	50	1-1/4	7	6	5.0	5.0
ABW23NSF	5/16	1/2	3/32	50	5/8	10	9	20.0	20.0
ABW27NSF	3/8	1/2	1/16	50	1-1/2	9	8	5.0	5.0
ABW28NSF	3/8	9/16	3/32	50	1	11	10	20.0	15.0
ABW29NSF	3/8	5/8	1/8	50	1	12	11	29.9	29.9
ABW32NSF	7/16	9/16	1/16	50	1-1/2	4	3	2.0	2.0
ABW33NSF	7/16	5/8	3/32	50	1-3/4	8	7	10.0	10.0
ABW36NSF	1/2	5/8	1/16	50	3	5	4	1.0	1.0
ABW37NSF	1/2	11/16	3/32	50	1-3/4	7	6	5.0	5.0
ABW38NSF	1/2	3/4	1/8	50	1-1/2	9	8	15.0	15.0
ABW45NSF	5/8	13/16	3/32	50	3	6	5	5.0	0.0
ABW46NSF	5/8	7/8	1/8	50	2-1/2	7	6	10.0	10.0
ABW53NSF	3/4	1	1/8	50	2-1/2	7	6	1.0	1.0
ABW62NSF	1	1-1/4	1/8	50	5	5	4	0.0	0.0
ABW69NSF	1-1/4	1-1/2	1/8	50	6	5	4	0.0	0.0
ABW74NSF	1-1/2	2	1/4	50	7	6	5	1.0	1.0

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

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, Shore A, 15s	D2240	50
Color	—	Translucent
Tensile Strength, psi (MPa)	D412	1,450 (10.0)
Ultimate Elongation, %	D412	770
Tear Resistance, lb-f/in (kN/m)	D624 Die B	200 (35.0)
Specific Gravity	D792	1.14
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.11
Compression Set Constant Deflection, % at 158°F (70°C) for 22 hrs. % at 347°F (175°C) for 22 hrs.	D395-03 Method B	7 35
Brittleness by Impact Temp., °F (°C)	D746	-112 (-80)
Maximum Recommended Operating Temp., °F (°C)	—	400 (204)
Dielectric Strength, v/mil (kV/mm)	D149	480 (19)
Tensile Modulus, at 200% Elongation, psi (MPa)	D412	280 (1.9)

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.

Sterilization Methods

Autoclavable – Steam 30 minutes at 15 psi (250°F)

Gas – Ethylene Oxide

Radiation – up to 5.0 Mrad

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® SPT-3350 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.



Saint-Gobain Performance Plastics

3910 Terry-Diane Street
Beaverton, MI 48612

Tel: (888) 387-0067 / (989) 435-9533

Fax: (989) 435-2355

www.processsystems.saint-gobain.com

NOTE: The data and details given in this document are correct and up to date. This document is intended to provide information about the product and possible applications. This document is not the product specification and does not provide specific features, nor does it guarantee product performance in specific applications. Saint-Gobain cannot anticipate or control the conditions of the field and for this reason strongly recommends that practical tests are conducted to ensure that the product meets the requirements of a specific application.

Tygon® is a registered trademark.