



Versilon™ SPX-50

High-Strength Silicone Tubing

Designed for Demanding Requirements

Peroxide-cured Versilon™ SPX-50 silicone tubing is designed for use in applications where flexibility, resiliency, and durability are required. Produced from a proprietary combination of silicon elastomers, this tubing optimizes critical physical properties such as tensile strength, elongation, and compression set, resulting in a more physically durable product. The smooth inner surface of the tubing reduces the risk of particulate entrapment and microscopic buildup during fluid transfer.

Consistently Reliable Results

Every lot of raw material used in the manufacture of Versilon™ SPX-50 silicone tubing undergoes a series of in-house physical property testing before use. This stringent evaluation of ingredients helps to provide the repeatable quality found in every foot of Versilon™ SPX-50 tubing. Tubing sample testing is performed every year. Heavy metals extraction analysis, as well as, cytotoxicity testing is performed to confirm the tubing's biocompatibility.

The Leader in Silicone Tubing Innovation

Versilon™ SPX-50 tubing provides versatility in use for a broad range of applications. However, for situations requiring uniquely engineered properties, Saint-Gobain Process Systems can design a tubing formulation suited to meet your specific needs. Specialty formulations may be designed to provide a combination of features – including ultra-high temperature resistance, electrical conductivity, closed cell sponge, pigmented colors, and long flexural life.

Features and Benefits

- Provides resiliency, long-life, and durability
- Ultra-smooth inner bore reduces risk of particulate entrapment
- Taste and odor free
- Withstands temperature extremes from -75°F to 350°F

Typical Applications

- Sterile filling and processing
- Analytical instrumentation
- Cosmetic production
- Environmental remediation
- Beverage dispensing
- Food and dairy processing
- Appliance manufacturing
- Electronic equipment

Versilon™ SPX-50

Part Number	ID	OD	Wall Thickness	Length	Min. Bend Radius	Max. Working Pressure	
	(in.)	(in.)	(in.)	(ft.)	(in.)	73°F (psi)*	320°F (psi)*
ABX00001	1/32	3/32	1/32	50	1/8	22	21
ABX00002	1/16	1/8	1/32	50	1/4	14	13
ABX00003	1/16	3/16	1/16	50	1/4	22	21
ABX00004	3/32	5/32	1/32	50	1/4	11	10
ABX00005	3/32	7/32	1/16	50	1/4	18	16
ABX00006	1/8	3/16	1/32	50	3/8	9	8
ABX00007	1/8	1/4	1/16	50	1/2	14	13
ABX00009	5/32	7/32	1/32	50	3/4	7	6
ABX00011	3/16	1/4	1/32	50	1	7	6
ABX00012	3/16	5/16	1/16	50	1/2	11	10
ABX00013	3/16	3/8	3/32	50	3/8	14	13
ABX00014	3/16	7/16	1/8	50	3/8	18	16
ABX00016	1/4	5/16	1/32	50	1-1/2	5	4
ABX00017	1/4	3/8	1/16	50	3/4	9	8
ABX00018	1/4	7/16	3/32	50	5/8	12	11
ABX00019	1/4	1/2	1/8	50	5/8	14	13
ABX00022	5/16	7/16	1/16	50	1-1/4	7	6
ABX00023	5/16	1/2	3/32	50	5/8	10	9
ABX00024	5/16	9/16	1/8	50	3/4	7	6
ABX00027	3/8	1/2	1/16	50	1-1/2	9	8
ABX00028	3/8	9/16	3/32	50	1	11	10
ABX00029	3/8	5/8	1/8	50	1	6	5
ABX00033	7/16	5/8	3/32	50	1-3/4	8	7
ABX00036	1/2	5/8	1/16	50	3	5	4
ABX00037	1/2	11/16	3/32	50	1-3/4	7	6
ABX00038	1/2	3/4	1/8	50	1-1/2	9	8
ABX00045	5/8	13/16	3/32	50	3	6	5
ABX00046	5/8	7/8	1/8	50	2-1/2	7	6
ABX00053	3/4	1	1/8	50	2-1/2	7	6
ABX42062	1	1-1/4	1/8	25	5	5	4
ABX42069	1-1/4	1-1/2	1/8	25	6	5	4
ABX42074	1-1/2	2	1/4	25	7	6	5

* Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM DI599.

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, Shore A, 15s	D2240-91	50
Tensile Strength, psi (MPa)	D412-92	1,500 (10.3)
Ultimate Elongation, %	D412-92	450
Tear Resistance, lb-f/in (kN/m)	D624-91 Die B	148 (26)
Specific Gravity	D792-91	1.17
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570-81	0.06
Compression Set Constant Deflection, % at 158°F (70°C) for 22 hrs. at 347°F (175°C) for 22 hrs.	D395-89 Method B	10 33
Brittleness by Impact Temp., °F (°C)	D746-79	-112 (-80)
Maximum Recommended Operating Temp., °F (°C)	—	350 (177) Continuous 400 (204) Intermittent
Dielectric Strength v/mil (kV/mm)	DI49-93	480 (19)
Tensile Modulus, at 200% Elongation, psi (MPa)	D412-92	425 (2.9)
Color	—	Translucent

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.

Sterilization Methods

- Autoclavable in steam
- Gas – Ethylene Oxide
- Radiation – Gamma or E-Beam

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.

VERSILON™ SPX-50 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.

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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.

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