



Versilon™ SPX-70 IB

Reinforced High Tensile Strength Silicone Tubing

Designed for Demanding Requirements

Peroxide-cured Versilon™ SPX-70 IB tubing is designed for use in applications where flexibility, resiliency and durability are required. Produced from a proprietary combination of silicone elastomers, this tubing optimizes critical physical properties such as tensile strength, elongation and compression set, resulting in a more physically durable product. Its smooth inner surface 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-70 IB 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™ silicone 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-70 IB 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
- Tough braid reinforcement permits use under elevated working pressures
- Taste and odor free
- Withstands repeated CIP and SIP cleaning and sterilization
- Temperature resistant from -112°F to 320°F

Typical Applications

- Sterile filling and processing
- Water purification systems
- Cosmetic production
- Beverage dispensing
- Food and dairy processing
- High temperature chemical processing
- Sanitary fitting assembly

Regulatory Compliance

- NSF-51
- FDA 21 CFR PART 177.2600

Versilon™ SPX-70 IB

Part Number	ID	OD	Wall Thickness	Min. Bend Radius	Max. Working Pressure		Vacuum Rating	
	(in)	(in)	(in)	(in)	73°F (psi)*	320°F (psi)*	73°F (in-Hg)	320°F (in-Hg)
AB6001718	3/16	35/79	6/47	1/4	180	175	29.9	29.9
AB6001719	1/4	17/33	11/83	1/2	145	140	29.9	29.9
AB6001720	3/8	11/16	5/32	3/4	210	190	29.9	29.9
AB6001721	1/2	72/85	17/98	1	185	165	29.9	29.9
AB6001722	5/8	49/50	11/62	1-1/2	135	125	29.9	29.9
AB6001671	3/4	1-3/20	1/5	2-1/4	170	105	29.9	29.9
AB6001724	1	1-23/59	8/41	2-1/2	105	75	29.9	29.9
AB6421725	1-1/4	1-7/11	11/57	4-1/4	80	65	25.0	20.0
AB6421726	1-1/2	1-9/10	1/5	5-1/4	70	45	10.0	10.0

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

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 sec	D2240-91	7I
Color	—	Clear
Opacity	—	Translucent
Tensile Strength, psi (MPa)	D412-92	1200 (8.3)
Ultimate Elongation, %	D412-92	300
Tear Resistance, lb-f/in (kN/m)	D624-91 Die B	130 (22.8)
Specific Gravity	D792-91	1.20
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570-95	0.08
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 30
Maximum Recommended Operating Temp., °F (°C)	—	320 (160)
Brittleness by Impact Temp., °F (°C)	D746-95	< -112 (-80)
Tensile Stress, psi (MPa) @ 200% Elongation	D412-92	700 (4.8)
Tensile Set, %	D412	10
Dielectric Strength, v/mil (kV/mm)	DI49-93	511 (20.1)

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.

Sterilization Methods

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

Gas – Ethylene Oxide

Radiation – Up to 2.5 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.

VERSILON™ SPX-70 IB 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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