





# Chemically Resistant Fluoropolymer Tubing

### Description

Versilon<sup>M</sup> PVDF copolymer tubing offers the chemical resistance of fluoropolymer tubing with added flexibility not found in standard PVDF. Its abrasion resistance, mechanical strength and inherent high purity make it ideal for a variety of aggressive applications.

Versilon™ PVDF tubing also offers better clarity than standard PVDF, low extractables, resistance to acidic solutions, and increased impact strength. These features make Versilon™ PVDF ideal for use in the semi-conductor industry, pulp and paper applications, and nuclear waste processing.

### **Features and Benefits**

- High purity/low extractables
- · Abrasion resistance
- Excellent chemical resistance
- UV and radiation resistance
- Mechanical strength and toughness
- Low permeability

### **Typical Applications**

- Chemical processing
- Food processing
- Nuclear waste processing
- Photovoltaic
- · Pulp and paper
- Semiconductor
- Water transfer and purification

#### **Regulatory Compliance**

• Material compliant with 21 CFR Sec. 177.2600 (c)(4)(i)



#### Versilon™ PVDF

Part Number	ID		OD		Wall Thickness	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
TSPVF8-0125-031-50	1/16	1.59	1/8	3.18	1/32	0.79
TSPVF8-0125-031.10	1/16	1.59	1/8	3.18	1/32	0.79
TSPVF8-0187-031-50	1/8	3.18	3/16	4.76	1/32	0.79
TSPVF8-0187-031.10	1/8	3.18	3/16	4.76	1/32	0.79
TSPVF8-0250-062-50	1/8	3.18	1/4	6.35	1/16	1.59
TSPVF8-0250-062.10	1/8	3.18	1/4	6.35	1/16	1.59
TSPVF8-0250-040-50	8/47	4.32	1/4	6.35	1/25	1.02
TSPVF8-0250-040.10	8/47	4.32	1/4	6.35	1/25	1.02
TSPVF8-0312-062-50	3/16	4.76	5/16	7.94	1/16	1.59
TSPVF8-0312-062.10	3/16	4.76	5/16	7.94	1/16	1.59
TSPVF8-0375-062-50	1/4	6.35	3/8	9.53	1/16	1.59
TSPVF8-0375-062.10	1/4	6.35	3/8	9.53	1/16	1.59
TSPVF8-0375-031-50	5/16	7.94	3/8	9.53	1/32	0.79
TSPVF8-0375-031.10	5/16	7.94	3/8	9.53	1/32	0.79
TSPVF8-0437-062-50	5/16	7.94	7/16	11.11	1/16	1.59
TSPVF8-0437-062.10	5/16	7.94	7/16	11.11	1/16	1.59
TSPVF8-0500-062-50	3/8	9.53	1/2	12.70	1/16	1.59
TSPVF8-0500-062.10	3/8	9.53	1/2	12.70	1/16	1.59
TSPVF8-0625-062-50	1/2	12.70	5/8	15.88	1/16	1.59
TSPVF8-0625-062.10	1/2	12.70	5/8	15.88	1/16	1.59
TSPVF8-0750-062-50	5/8	15.88	3/4	19.05	1/16	1.59
TSPVF8-0750-062.10	5/8	15.88	3/4	19.05	1/16	1.59
TSPVF8-0875-062-50	3/4	19.05	7/8	22.23	1/16	1.59
TSPVF8-0875-062.10	3/4	19.05	7/8	22.23	1/16	1.59

<sup>\*</sup>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 D), 1 sec	D2240	65D
Color	_	Clear
Opacity	_	Opaque
Tensile Strength, psi (MPa)	D412	2900 (20.0)
Ultimate Elongation, %	D412	400
Specific Gravity	D792	1.77
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.03
Maximum Recommended Operating Temp., °F (°C)	_	250 (121)

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.

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.



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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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