

# Versilon<sup>®</sup> ETFE Tubing

## RADIATION RESISTANT TUBING

### Excellent Mechanical Properties

Versilon<sup>®</sup> ETFE tubing offers improved mechanical properties over fluoropolymers such as FEP and PFA and is resistant to radiation, abrasion and impact. The material is weather-resistant, inert to most solvents and chemicals, and has a continuous service temperature of 300°F (148°C).

Due to its mechanical properties, Versilon<sup>®</sup> ETFE tubing can be used to manufacture valves, fittings, bearings, pump components, and electrical coatings. Versilon<sup>®</sup> ETFE tubing is made from materials that meet ASTM standard D3159.

### Typical Applications

- Bearings
- Electrical coatings
- Fittings
- Pump components
- Valves

### Features and Benefits

- Mechanical strength
- Abrasion resistant
- Broad temperature range
- Good chemical resistance
- Continuous service temperature  
300°F (148°C)



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Part Number	ID		OD		Wall Thickness		Length
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)
TSTZ83-0062-021-50	0.02	0.51	0.06	1.59	0.02	0.54	50
TSTZ83-0062-021.10	0.02	0.51	0.06	1.59	0.02	0.54	100
TSTZ83-0062-023-50	0.02	0.41	0.06	1.59	0.02	0.59	50
TSTZ83-0062-023.10	0.02	0.41	0.06	1.59	0.02	0.59	100
TSTZ83-0125-016-50	3/32	2.38	1/8	3.18	1/64	0.40	50
TSTZ83-0125-016.10	3/32	2.38	1/8	3.18	1/64	0.40	100
TSTZ83-0125-031-50	1/16	1.59	1/8	3.18	1/32	0.79	50
TSTZ83-0125-031.10	1/16	1.59	1/8	3.18	1/32	0.79	100
TSTZ83-0250-031-50	3/16	4.76	1/4	6.35	1/32	0.79	50
TSTZ83-0250-031.10	3/16	4.76	1/4	6.35	1/32	0.79	100
TSTZ83-0250-062-50	1/8	3.18	1/4	6.35	1/16	1.59	50
TSTZ83-0250-062.10	1/8	3.18	1/4	6.35	1/16	1.59	100
TSTZ83-0312-040-50	0.23	5.89	0.31	7.94	0.04	1.02	50
TSTZ83-0312-040.10	0.23	5.89	0.31	7.94	0.04	1.02	100
TSTZ83-0375-048-50	0.28	7.06	0.38	9.53	0.05	1.23	50
TSTZ83-0375-048.10	0.28	7.06	0.38	9.53	0.05	1.23	100
TSTZ83-0500-062-50	3/8	9.53	1/2	12.70	1/16	1.59	50
TSTZ83-0500-062.10	3/8	9.53	1/2	12.70	1/16	1.59	100

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, 1 sec	D2240	72D
Color	—	Clear
Opacity	—	Opaque
Tensile Strength, psi (MPa)	D412	6800 (47.0)
Ultimate Elongation, %	D412	300
Specific Gravity	D792	1.70
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	<0.01
Maximum Recommended Operating Temp., °F (°C)	—	300 (150)
Brittleness by Impact Temp., °F (°C)	D746	-150 (-66)
Low Temp. Flexibility, °F (°C)	D380	200 (100)

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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