

# Versilon® MUS-1000 Tubing

## HIGH CLARITY, SUPERIOR SURFACE SMOOTH FLUOROPOLYMER TUBING

Manufacturers worldwide recognize the paramount importance of chemical integrity in production processes. To achieve the required purity levels, they turn to chemically inert fluoropolymer tubing. Versilon® MUS-1000 tubing from Saint-Gobain not only maintains fluid integrity but also surpasses standard fluoropolymer resins in several key aspects.

Versilon® MUS-1000 tubing stands out due to its remarkable surface smoothness, up to six times smoother than conventional fluoropolymers. This minimizes cross-contamination, resulting in greater product yields and easier system cleaning. Additionally, its visual clarity is virtually unmatched among fluoropolymers. Coupled with its chemical inertness, Versilon® MUS-1000 tubing is ideal for identifying a wide range of chemicals. Its transparency allows significant UV light transmission, making it perfect for purification applications.

Engineered for uncompromising purity, Versilon® MUS-1000 tubing maintains the mechanical properties expected from standard fluoropolymers. It resists common chemicals and UV degradation while enabling efficient UV ray transmission.

### Typical Applications

- Environmental
- Chemical processing
- General industrial
- Water purification
- Nuclear



### Features and Benefits

- Vastly superior surface smoothness compared to other fluoropolymer tubing
- Very high UV transmission compared to other fluoropolymer tubing
- Superior clarity versus other fluoropolymer tubing
- Resistant to virtually all commonly used chemicals
- Excellent mechanical properties



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Part Number**	ID	OD	Wall Thickness	Length	Min. Bend Radius	Max. Working Pressure*
	(in)	(in)	(in)	(ft)	(in)	73°F (psi)
MUS1000-0125-031-50	1/16	1/8	1/32	50	1/2	200
MUS1000-0250-062-50	1/8	1/4	1/16	50	3/4	194
MUS1000-0250-047-50	5/32	1/4	3/32	50	7/8	145
MUS1000-0250-031-50	3/16	1/4	1/32	50	1	91
MUS1000-0312-031-50	1/4	5/16	1/32	50	1-3/4	71
MUS1000-0375-062-50	1/4	3/8	1/16	50	1-1/4	125
MUS1000-0500-062-50	3/8	1/2	1/16	50	2	91

Custom sizes and lengths available upon request. Metric sizes available. Available in long continuous lengths.

\* Safety factor of 4 to 1 ratio of burst pressure to working pressure ASTM D1599.

\*\* Additional lengths available upon request.

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Surface Smoothness, microns (based on 1/4" x 3/8" tubing)	—	1.7
Durometer Hardness (Shore D), 1 sec	D2240	56
Color	—	Clear
Minimum Continuous Operating Temp., °F (°C)	—	-400 (-240)
Maximum Continuous Operating Temp., °F (°C)	—	400 (205)
Specific Gravity	D792	2.14
UL Flammability Test	UL94	V-0
Tensile Strength, psi (MPa)	D638	4,350 (30)
Ultimate Elongation, %	D638	325
UV Transmission, % @ 254 nm (0.008" thickness)	-	86
Refractive Index	D542	1.34
Flexural Modulus, ksi (GPa)	D790	85 (0.586)

Unless otherwise noted, all tests were conducted at room temperature 73°F (23°C). Values shown were determined on 0.075" (6.35 mm) thick extruded strip, 0.075" (6.35 mm) thick molded ASTM plaques or molded ASTM durometer buttons. Size of tubing tested is 1/8" ID x 1/4" OD.

## Relative Chemical Resistance Properties\*

Acids			Bases			Salts	Alcohols	Ketones
Conc.	Med.	Weak	Conc.	Med.	Weak			
E	E	E	E	E	E	E	E	E
Aliphatic Hydrocarbons			Aromatic Hydrocarbons			Halogenated Hydrocarbons		
E			E			E		

E = Excellent F = Fair U = Unsatisfactory  
\*All tests conducted at room temperature.



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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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