

Gore® STA-PURE Series PFL

PTFE-reinforced fluoroelastomer tubing

6 *The tubing material with
all the advantages* 9

Exceptional life and chemical resistance

STA-PURE PFL handles nearly all aggressive chemicals, including organic solvents such as methyl ethyl ketone, toluene and acetone. With STA-PURE PFL, even the toughest pumping operation can benefit from the advantages of peristaltic pumping

Minimal breakdown risk

Under transfer conditions, STA-PURE PFL tubes operate more than 50 times longer than other fluoroelastomer tubing: thousands of hours of uninterrupted pumping, with minimal risk of burst or other tube breakdown.

STA-PURE PFL offers exceptional life, exceptional chemical resistance and exceptional purity

- Highly resistant to aggressive chemicals, including organic solvents
- 50 times longer life than other fluoroelastomers
- Extraordinary burst resistance
- USP and FDA approval for pharmaceutical and food use
- Negligible solvent swell
- Stable flow rate over time
- Pressures up to 4 bar

The ideal tubing choice in pharmaceutical applications, speciality chemical industries and solvent-based processing applications

Unbeatable purity

STA-PURE PFL is a high-performance composite of PTFE and a high-grade fluoroelastomer, giving extraordinary chemical resistance, extremely long life and very high burst pressures. It is free from plasticisers, acid acceptors and other processing aids, making it one of the purest tubings available. Leachability tests using ethyl acetate yielded over 100 times less total extractables than other fluoroelastomer tubing materials. In addition, STA-PURE PFL has passed FDA food contact certification and Class VI tests for pharmaceutical applications.

Widely used for solvent-based processing, transfer and metering, handling aggressive chemicals such as monobutyltintrichloride, methyl ethyl ketone, toluene and acetone.

STA-PURE PFL	Typical values
Material	ePTFE and fluoroelastomer composite
Colour / transparency	Off-white / opaque
Spallation	Excellent
Life, hours	313/314, 520R, 620R pumpheads: 1,000hr
Certification	USP Class VI, FDA reg. 21 CFR 177.2600 for aqueous food contact. ISO 10993-1, USDA and 3A approved
Sterilisation methods	Autoclave, CIP, SIP: refer to Watson-Marlow for details
Operating temperature	-20C-80C
Hardness, shore A (5 sec)	60
Specific gravity	-
Tear B, ppi	-
Ultimate tensile strength, psi	-
Elongation at break, %	-
Tensile stress at 100% elongation, psi	-
Compression set, %	-
Weather resistance	Excellent
Sunlight resistance	Excellent
Gas permeability, O₂cc.cm x 10⁻⁸ / cm².sec.atm	-
Gas permeability rating	-
Water absorption	Good
Odour	Excellent
ASTM methods	Hardness: ASTM D 2240; Specific gravity: ASTM D 792; Tear B, Ultimate tensile strength, Elongation at break, Tensile stress at 100% elongation: ASTM D 412

Bore		Wall		No	Element length	Part number
inch	mm	inch	mm			
1/16	1.6	1/16	1.6	14	305mm	965.0016.016
1/8	3.2	1/16	1.6	16		965.0032.016
3/16	4.8	1/16	1.6	25		965.0048.016
1/4	6.4	1/16	1.6	17		965.0064.016
5/16	8.0	1/16	1.6	18		965.0080.016
1/16	1.6	1/16	1.6	14	355mm	965.0016.L16
1/8	3.2	1/16	1.6	16		965.0032.L16
3/16	4.8	1/16	1.6	25		965.0048.L16
1/4	6.4	1/16	1.6	17		965.0064.L16
5/16	8.0	1/16	1.6	18		965.0080.L16
1/16	1.6	3/32	2.4	119		965.0016.024
1/8	3.2	3/32	2.4	120		965.0032.024
3/16	4.8	3/32	2.4	15		965.0048.024
1/4	6.4	3/32	2.4	24		965.0064.024
5/16	8.0	3/32	2.4	121		965.0080.024
3/8	9.6	3/32	2.4	122		965.0096.024
1/4	6.4	1/8	3.2	26	610mm	965.0064.032
3/8	9.6	1/8	3.2	73		965.0096.032
1/2	12.7	1/8	3.2	82		965.0127.032
3/4	15.9	1/8	3.2	184		965.0159.032

STA-PURE PFL for compatibility

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WARNING These products are not designed for use in, and should not be used for, patient-connected applications.

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Value for life