

Masterflex® Puri-Flex™ Pump Tubing

High-performance and long-life tubing for high-purity applications

- Heat sealable and weldable
- Full validation packet available
- Animal-derived component-free (ADCF) and meets the following classifications: USP Class VI, FDA 21 CFR 177.2600, ISO 10993 Part 4 (nonhemolytic) and Part 5 (noncytotoxic), and ISO 9001 cleanroom manufacture
- Gamma stable
- Secured supply chain
- Non-DEHP, no phthalates or halogen plasticizers
- Low extractables or leachables
- Low spallation (particle release) to product
- Low protein binding
- Translucent for sample viewing
- Cost effective tubing solution



More durable than other flexible tubing

- Autoclave multiple times at the new higher 135°C standard or sterilize by ethylene oxide or gamma irradiation to 45 kGy
- Soft and flexible for long life in Masterflex peristaltic pumps
- Temperature range: -50 to 135°C (-58 to 275°F)
- Good chemical resistance

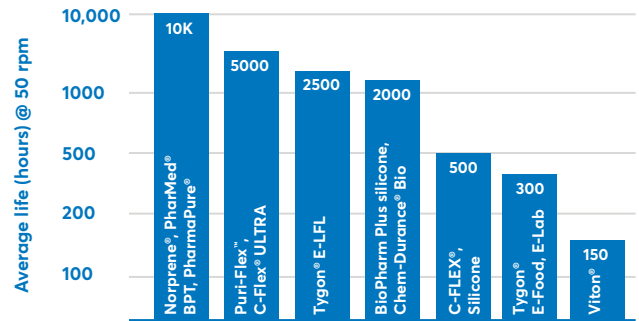
Applications


- Cell and tissue culture work
- Pharmaceutical
- Biotech applications
- General-purpose lab

Performance Specifications

- Shore A hardness: 68
- Low permeability: Barrier 02 (CC/MIL/100)|N2/ATM/Day) = 2260
- Thermally weldable and sealable
- RoHS- and REACH-compliant and produces no toxic emissions when incinerated
- Meets regulations for 3A, NSF-51, EU Pharmacopeia, USP Class VI, and FDA
- ADCF, non-phthalate, and non-DEHP

TUBING MATERIAL LIFE COMPARISON



Pump tubing formulation	Advantages	Meets classifications	Application suitability ¹							Gas permeability	Sterilization
			Acids	Alkalies	Organic solvents	Pressure	Vacuum	Viscous fluids	Sterile fluids		
Puri-Flex™ MFLA96419 	Biocompatible. Heat sealable and weldable. Long pump life when compared to silicone or other TPE tubings. Low spallation when compared to silicone or some other TPE tubings. Very low protein binding. Cost effective. No halogens or phthalates. Translucent, clear to light white.	USP Class VI FDA 21 CFR 177.2600 and 177.1810 REACH (non-DEHP) compliant RoHS compliant ADCF compliant	G	G	N/R	G	G	E	E	CO ₂ : 1200 H ₂ : — O ₂ : 200 N ₂ : 80	Sterilize by EtO, autoclave up to 135°C (275°F), or gamma irradiation up to 4.5 Mrad.
			Temperature range: Static: -50 to 135°C (-58 to 275°F) Dynamic (pumping): -30 to 100°C (-22 to 212°F)								

¹E = Excellent, G = Good, F = Fair, P = Poor, N/R = not recommended

Microbore/Auto Analysis Tubing Sizes

Tubing size	ID		OD		Wall		Ft/pk	Catalog No.
	inches	metric	inches	metric	inches	metric		
ISM 10	0.008	0.19	0.078	1.99	0.035	0.9	50	MFLX96418-10
ISM 12	0.01	0.25	0.08	2.05	0.035	0.9	50	MFLX96418-12
ISM 14	0.015	0.38	0.085	2.07	0.035	0.9	50	MFLX96418-14
ISM 16	0.017	0.44	0.087	2.24	0.035	0.9	50	MFLX96418-16
ISM 18	0.02	0.51	0.09	2.31	0.035	0.9	50	MFLX96418-18
ISM 22	0.025	0.64	0.095	2.44	0.035	0.9	50	MFLX96418-22
ISM 24	0.03	0.76	0.096	2.46	0.033	0.85	50	MFLX96418-24
ISM 26	0.035	0.89	0.101	2.59	0.033	0.85	50	MFLX96418-26
ISM 28	0.04	1.02	0.106	2.72	0.033	0.85	50	MFLX96418-28
ISM 30	0.045	1.14	0.111	2.84	0.033	0.85	50	MFLX96418-30
ISM 32	0.051	1.3	0.117	3	0.033	0.85	50	MFLX96418-32
ISM 34	0.056	1.42	0.122	3.12	0.033	0.85	50	MFLX96418-34
ISM 36	0.06	1.52	0.126	3.22	0.033	0.85	50	MFLX96418-36
ISM 38	0.065	1.65	0.131	3.35	0.033	0.85	50	
ISM 40	0.073	1.85	0.139	3.55	0.033	0.85	50	MFLX96418-40
ISM 42	0.081	2.06	0.147	3.76	0.033	0.85	50	MFLX96418-42
ISM 44	0.09	2.29	0.156	3.99	0.033	0.85	50	MFLX96418-44
ISM 46	0.1	2.54	0.166	4.24	0.033	0.85	50	MFLX96418-46
ISM 48	0.11	2.79	0.176	4.49	0.033	0.85	50	MFLX96418-48

Masterflex® Tubing Sizes

Tubing size	Hose barb in. (mm)	Ft/pk	Catalog No.
L/S° Precision pump tubing			
L/S 13	1/16 (1.6)	25	MFLX96419-13
L/S 14	1/16 (1.6)		MFLX96419-14
L/S 16	1/8 (3.2)		MFLX96419-16
L/S 25	3/16 (4.8)		MFLX96419-25
L/S 17	1/4 (6.4)		MFLX96419-17
L/S 18	3/8 (9.5)		MFLX96419-18
L/S° High-Performance Precision pump tubing			
L/S 15	3/16 (4.8)	25	MFLX96419-15
L/S 24	1/4 (6.4)		MFLX96419-24
L/S 35	3/8 (9.5)		MFLX96419-35
L/S 36	3/8 (9.5)		MFLX96419-36
I/P° Precision pump tubing			
I/P 26	1/4 (6.4)	25	MFLX96419-26
I/P 73	3/8 (9.5)		MFLX96419-73
I/P 82	1/2 (12.8)		MFLX96419-82
I/P° High-Performance Precision pump tubing			
I/P 70	3/8 (9.5)	10	MFLX96419-70
I/P 88	1/2 (12.8)		MFLX96419-88
I/P 89	3/8 (9.5)		MFLX96419-89
B/T° PerfectPosition® pump tubing			
B/T 87	3/8 (9.5)	10	MFLX96419-87
B/T 91	3/4 (19.1)		MFLX96419-91