

BIOPRENE® TUBING

Thermoplastic elastomer tubing

Ideal for:
**Critical
biopharmaceutical
processes requiring
accurate, reliable
and repeatable
performance**

Bioprene peristaltic pump tubing is USP Class VI and FDA compliant and suitable for biopharmaceutical and food applications. Bioprene's long peristaltic life ensures process security, thereby reducing risks in critical cGMP applications.

- USP Class VI and FDA certified and NSF51 listed for biopharmaceutical and food applications
- Fully documented biocompatibility including FDA Drug Master File
- UV opaque and fully weldable
- Sterilisable by gamma irradiation and autoclaving



BIOPRENE® TUBING

For long life and chemical compatibility

Suitable for upstream and downstream biopharmaceutical processes, Bioprene offers exceptionally long peristaltic life, ensuring process security. Bioprene demonstrates a broad chemical compatibility; especially resistance to strong acids, alkalis and oxidising agents.

Bioprene is widely applicable in biopharmaceutical manufacturing operations such as metering, transfer and filtration. It is ideal for media feed and pH control in fermentation and metering tablet coating materials.

Bioprene is also suitable for a variety of applications in the food and beverage industry; especially product transfer and metering.

Operating pressures of 0-2 bar can be achieved with Bioprene continuous tubing. A range of LoadSure tube elements increase the pressure capability up to a maximum of 7 bar.

Bioprene	Typical Values
Material	Thermoplastic elastomer
Colour/transparency	Beige/opaque
Spallation	Low
Life/hours	313/314, 520R pumpheads -10,000 hrs 620R pumpheads - 6000 hrs
Certification	U SP Class VI, FDA 21CFR 177.2600 for contact with aqueous food. NSF51 listed
Sterilisation methods	Gamma, autoclave, EtO, ask Watson Marlow for more detail
Operating temperature	5C to 80C
Hardness, shore A (5sec)	62 to 68
Specific gravity	0.95 to 0.98
Ultimate tensile strength psi	798 to 9999
Elongation at break, %	340 to 600
UV resistance	Excellent
Permeability rating	Fair
Water absorption	Low

Tube ordering codes						
Bore		Wall		Coil size		
mm	inch	mm	inch	15m/50ft	5m/16ft	152m/500ft
0.5	1/50	1.6	1/16	933.0005.016	933.0005.J16	933.0005.R16
0.8	1/32	1.6	1/16	933.0008.016	933.0008.J16	933.0008.R16
1.6	1/16	1.6	1/16	933.0016.016	933.0016.J16	933.0016.R16
2.4	3/32	1.6	1/16	933.0024.016	933.0024.J16	933.0024.R16
3.2	1/8	1.6	1/16	933.0032.016	933.0032.J16	933.0032.R16
4.8	3/16	1.6	1/16	933.0048.016	933.0048.J16	933.0048.R16
6.4	1/4	1.6	1/16	933.0064.016	933.0064.J16	933.0064.R16
8.0	5/16	1.6	1/16	933.0080.016	933.0080.J16	933.0080.R16
1.6	1/16	2.4	3/32	933.0016.024	933.0016.J24	933.0016.R24
3.2	1/8	2.4	3/32	933.0032.024	933.0032.J24	933.0032.R24
						122m/400ft
4.8	3/16	2.4	3/32	933.0048.024	933.0048.J24	933.0048.R24
						91m/300ft
6.4	1/4	2.4	3/32	933.0064.024	933.0064.J24	933.0064.R24
						61m/200ft
8.0	5/16	2.4	3/32	933.0080.024	933.0080.J24	933.0080.R24
						46m/150ft
9.6	3/8	2.4	3/32	933.0096.024	933.0096.J24	933.0096.R24
4.8	3/16	3.2	1/8	933.0048.032	-	-
					5m/10ft	61m/200ft
6.4	1/4	3.2	1/8	933.0064.032	933.0048.I32	933.0064.R32
						46m/150ft
9.6	3/8	3.2	1/8	933.0096.032	933.0096.I32	933.0096.R32
12.7	1/2	3.2	1/8	933.0127.032	933.0127.I32	-
15.9	5/8	3.2	1/8	933.0159.032	933.0159.I32	-
8.0	-	4.0	-	933.0080.040	933.0080.I40	-
12.0	-	4.0	-	933.0120.040	933.0120.I40	-
16.0	-	4.0	-	933.0160.040	933.0160.I40	-
9.6	3/8	4.8	3/16	933.0096.048	933.0096.I48	-
12.7	1/2	4.8	3/16	933.0127.048	933.0127.I48	-
15.9	5/8	4.8	3/16	933.0159.048	933.0159.I48	-
19.0	3/4	4.8	3/16	933.0190.048	933.0190.I48	-
25.4	1	4.8	3/16	933.0254.048	933.0254.I48	-

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

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Tubing

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