

# Bioprene

Bioprene - Thermoplastic tubing



## Features and benefits

- Certification: USP Class VI and FDA regulation 21CFR 177:2600 for contact with aqueous food
- Sterilizable by gamma irradiation and autoclaving
- Available as standard in 15 different bore sizes (13 for elements), five wall thicknesses (3 for elements) and three coil lengths, including bulk reels and LoadSure elements. Other sizes available on request.
- Operating temperature: 41 °C to 176 °C
- Color / transparency: Beige/opaque
- Spallation: Low



## Technical specifications

	Bioprene
Bore size	0.5 - 25.4 mm
Bore size	0.02 - 1 in
Wall thickness	1.6 - 4.8 mm
Wall thickness	0.0625 - 0.1875 in
Length	3 - 152 m
Colour	Beige
Transparency	Opaque
Spallation	Low
Certification	FDA 21CFR177.2600, NSF51 listed, USP Class VI
Operating temperature range	5 to 80 °C
Operating temperature range	41 to 176 °F
Hardness, shore A (5sec)	62 to 68
Specific gravity	0.95 to 0.98 g/ml
UV resistance	Excellent
Ultimate tensile strength	>=798 psi
Ultimate tensile strength	>=5.3 MPa
Elongation at break	340 to 600 %
Tensile stress at 100% elongation	1.9 to 3 Mpa
Tensile stress at 100% elongation	28 to 43 Psi
Gas permeability rating	Low
Compression set	5 to 42.5 %
Water absorption	Low
Shelf life	5 years
Gamma stability	25 to 40kGy
Autoclave stability	121 °C 30 minutes
Sterilisation methods	Autoclave, Gamma

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

## Materials of construction

	Bioprene
Tubing	Thermoplastic elastomer

## Product codes

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.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	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
						<b>10m/32ft</b>
2.4	3/32	1.6	1/16			933.0024.016
						<b>122m/400ft</b>
4.8	3/16	2.4	3/32	933.0048.024	933.0048.J24	933.0048.R24
						<b>91m/300ft</b>
6.4	1/4	2.4	3/32	933.0064.024	933.0064.J24	933.0064.R24
						<b>61m/200ft</b>
8	5/16	2.4	3/32	933.0080.024	933.0080.J24	933.0080.R24
						<b>46m/150ft</b>
9.6	3/8	2.4	3/32	933.0096.024	933.0096.J24	933.0096.R24
						<b>3m/10ft</b>
6.4	1/4	3.2	1/8	933.0064.032	933.0048.I32	933.0064.R32
						<b>46m/150ft</b>
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	-	4	-	933.0080.040	933.0080.I40	-
12	-	4	-	933.0120.040	933.0120.I40	-
16	-	4	-	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	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	-

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