



Bio-Sil® 1450 Tubing

for Medical Device Manufacturers

Bio-Sil® 1450 Silicone Tubing

Bio-Sil® 1450 platinum-cured silicone tubing is the next generation in ultra-pure silicone tubing for the medical market. This high-performance pump tube is available in 50 Shore A durometer and is ideally suited for medical applications where strength, durability, pump performance and biocompatibility are of primary importance.

Characteristics

Bio-Sil® 1450 is manufactured and packaged in a certified clean room from the finest grade silicone materials. This formulation features low extractables, excellent pump life, and imparts no taste or odors.

Biocompatibility

Bio-Sil® is a highly biocompatible silicone material designed specifically for medical applications. Bio-Sil® silicone tubing is manufactured and tested to USP <88>, Plastic Class VI criteria and is non-toxic, non-hemolytic and non-pyrogenic.

Bio-Sil® 1450 Options

- Custom laylines
- Gamma irradiated
- Bulk spool packaging
- Custom sizes available

Sterilization Methods

- Autoclavable
- Radiation – up to 5.0 Mrad (50 Kilogray)
- Gas – Ethylene Oxide

Platinum-Cured Silicone Tubing

Features / Benefits

- Designed to meet specific needs of medical customers
- Ultra-low extractables
- Fully sterilizable
- Odor free
- Meets USP <88>, Plastic Class VI Criteria

Typical Applications

- Peristaltic pumps
- Drug delivery
- Blood analysis

Important: “This Saint-Gobain product is a medical component intended for processing or use in the manufacture or assembly of medical devices before the finished medical device is packaged/ labeled; it is intended to be included as part of the finished, packaged, and labeled device [21CFR820.3(c)]. Please refer to our Medical Products Disclaimer at www.medical.saint-gobain.com/resources/regulatory-and-quality/medical-product-disclaimer.

Caution: For manufacturing, processing or repacking”



Bio-Sil® 1450 Sizes

Part Number	ID (in)	OD (in)	Wall (in)	Length (ft)	ID (mm)	OD (mm)	Wall (mm)
BSI450-012-025	0.012	0.025	0.007	25	0.305	0.635	0.178
BSI450-020-037	0.020	0.037	0.009	25	0.508	0.940	0.229
BSI450-020-083	0.020	0.083	0.031	50	0.508	2.108	0.794
BSI450-025-047	0.025	0.047	0.011	50	0.635	1.194	0.279
BSI450-030-065	0.030	0.065	0.018	50	0.762	1.651	0.457
BSI450-031-094	0.031	0.094	0.031	50	0.794	2.381	0.794
BSI450-040-085	0.040	0.085	0.023	50	1.016	2.159	0.584
BSI450-058-077	0.058	0.077	0.010	50	1.473	1.956	0.254
BSI450-063-095	0.063	0.095	0.017	50	1.588	2.413	0.432
BSI450-063-125	0.063	0.125	0.031	50	1.588	3.175	0.794
BSI450-078-125	0.078	0.125	0.023	50	1.981	3.175	0.584
BSI450-094-156	0.094	0.156	0.031	50	2.381	3.969	0.794
BSI450-104-192	0.104	0.192	0.044	50	2.642	4.877	2.642
BSI450-125-188	0.125	0.188	0.031	50	3.175	4.763	0.794
BSI450-125-250	0.125	0.250	0.063	50	3.175	6.350	1.588
BSI450-132-183	0.132	0.183	0.026	50	3.353	4.648	0.660
BSI450-156-219	0.156	0.219	0.031	50	3.969	5.556	0.794
BSI450-188-250	0.188	0.250	0.031	50	4.763	6.350	0.794
BSI450-188-313	0.188	0.313	0.063	50	4.763	7.938	1.588
BSI450-188-375	0.188	0.375	0.094	50	4.763	9.525	2.381
BSI450-188-438	0.188	0.438	0.125	50	4.763	11.113	3.175
BSI450-250-313	0.250	0.313	0.031	50	6.350	7.938	0.794
BSI450-250-375	0.250	0.375	0.063	50	6.350	9.525	1.588
BSI450-250-438	0.250	0.438	0.094	50	6.350	11.113	2.381
BSI450-250-500	0.250	0.500	0.125	50	6.350	12.700	3.175
BSI450-313-438	0.313	0.438	0.063	50	7.938	11.113	1.588
BSI450-313-500	0.313	0.500	0.094	50	7.938	12.700	2.381
BSI450-313-563	0.313	0.563	0.125	50	7.938	14.300	3.175
BSI450-375-500	0.375	0.500	0.063	50	9.525	12.700	1.588
BSI450-375-563	0.375	0.563	0.094	50	9.525	14.288	2.381
BSI450-375-625	0.375	0.625	0.125	50	9.525	15.875	3.175
BSI450-500-625	0.500	0.625	0.063	50	12.700	15.875	1.588
BSI450-500-688	0.500	0.688	0.094	25	12.700	17.463	2.381
BSI450-500-750	0.500	0.750	0.125	25	12.700	19.050	3.175
BSI450-625-875	0.625	0.875	0.125	25	15.875	22.225	3.175
BSI450-750-1000	0.750	1.000	0.125	10	19.050	25.400	3.175
BSI450-1000-1250	1.000	1.250	0.125	10	25.400	31.750	3.175

Custom sizes also available.

Bio-Sil® 1450 Physical Properties

Property	ASTM Method	Value or Rating (metric)
Durometer Hardness, Shore A	D2240	52
Color	-	Translucent
Tensile Strength, psi (MPa)	D412	1293 (8.91 MPa)
Ultimate Elongation, 100%	D412	719
Tear Resistance, Die B, ppi (kN/m)	D624	164 (50.1 kN/m)
Specific Gravity (g/cm ²)	D792	1.14 (g/cm ²)
Tensile Modulus at 200% Elongation, psi (MPa)	D412	241 (1.38 MPa)

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

Bio-Sil® is a registered trademark.

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IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse, or inability to use, this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.

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