

Peroxide Cured Tubes

Silicone Peroxide Cured Tubing FDA USP VI

Silicone Medical

Silicon Medical tubing is made under good manufacturing procedures and conforms to the biocompatibility requirements of USP Class VI. Silicon Medical's surface properties resist sticking and encrustation, and will not support bacteria growth. The tubing is soft, pliable, and contains no plasticizers which could leach out, causing flow contamination or tube hardening.

Care is recommended in the selection and application of fittings and clamps as sharp barbed fittings or unlined metal clamps could tear into the tubing wall.

If exposed to repeated steam sterilization or long-term high temperature or pressure, silicone will eventually relax and become gummy. It should then be replaced. Peroxide-cured Silicon Medical tubing is supplied in individual, non-sterile heat-sealed polybags and should be sterilized prior to use.

Silicon Medical is not recommended for implantable or in-body uses or for continuous steam applications.



KEY FEATURES



Made in U.S.A.

- Finished product meet USP Class VI requirements
 - Manufactured under good manufacturing procedures in a controlled environment
 - Able to resist extreme temperature variation: -100°F to 400°F
 - Reusable - will withstand repeated sterilization
 - Translucent natural color for visual contact with the flow
 - Odorless, tasteless, and inert
- Raw materials meet FDA requirements per FDA 21 CFR 177.2600 for use with food contact surfaces
- May be used on peristaltic pumps
 - Free of BPA, latex and phthalates
 - REACH and RoHS compliant

SPECIFICATIONS

Product Number	Suggested Sizes for pumpst†	I.D. Ins. diameter (in.)	O.D. Outs. diameter (in.)	Wall (in.)	Standard Length (Ft.)
281 0304		0.030	0.065	0.018	50
281 0381		1/32	5/32	1/16	50
281 0458	●	0.040	0.085	0.023	50
281 0689		1/16	1/8	1/32	50
281 0766		1/16	3/16	1/16	50
281 0843	●	5/64	1/8	0.024	50
281 0920		0.104	0.192	0.044	50
281 0997		1/8	1/4	1/16	50
281 1151		3/16	5/16	1/16	50
281 1228	●	3/16	3/8	3/32	50
281 1305	●	1/4	3/8	1/16	50
281 1382	●	1/4	7/16	3/32	25
281 1459	●	1/4	1/2	1/8	25
281 1536		5/16	7/16	1/16	25
281 1613	●	5/16	1/2	3/32	25
281 1690*		3/8	1/2	1/16	50
281 1844	●	3/8	5/8	1/8	25
281 1921*		1/2	5/8	1/16	25

*Limited stock availability, lead times and minimums may apply - call for details.
Sold by standard coil length only. Add length suffix to part number when ordering.
Example: 50 ft. of 0.030" I.D. x 0.065" O.D. tubing is part number 281 0304-50.
†† Most common peristaltic pump sizes based on I.D. and wall requirements.
BOLD indicates the critical dimension for fittings application.

PHYSICAL PROPERTIES**

● Hardness, Shore A±5	60
● Tensile Strength, psi	1305
● Elongation at Break, %	429
● Tear Resistance, Die B, pli	177
● Modulus at 100%, psi	230
● Brittle Temperature, °F	-100
● Maximum Operating Temperature, °F	400

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

Similar Tubes

Medical grade silicone tubing	Silicone Medical
Peroxide Cured Tube	SPST-PE
Silicone Tubing	Silicon

Silicone Peroxide Cured Tubing FDA USP VI

SPST-PE

High tear strength laboratory tubing has been developed to meet the quality requirements and exacting standards of today's pharmaceutical and biotechnical industries. In particular to resist extremes of temperature and the high wear rate of the peristaltic pump.

Extremely resistant to ozone, UV concentrations and a wide range of chemicals, this tubing contains no sulfur or acid producing extracts to leach into your product. Special bore and wall thicknesses, degrees of hardness, cross sections are available to minimum order. Repetitive cutting and fabrication to tolerance is available to suit your manufacturing needs. Stock range dimensional tolerance to BS3734



REGISTERED COMPLIANCES

- 21 CFR 177.2600
- USP CLASS VI
- European Pharmacopeia 3.19
- FDA, BfR
- DIN ISO 10993

KEY FEATURES

- General temperature range: -60°C to +200°C (250°C) intermittent
- Repeatedly autoclavable
- High resilience to tear and compression set for extended peristaltic pump use
- Natural translucent color for visual flow.
- Odorless, tasteless and inert
- Extended post cure standard for minimum DCBA levels
- For general and laboratory use
Dairy tubing
- Cut to length service available

TYPICAL VALUES

- Specification
- Color
- Specific Gravity
- Hardness
- Tensile Strength
- Elongation At Break
- Tear Strength
- Post Cure

High-tear strength medical silicone
Translucent ex stock
1.18 g/cm³
60° shore A'
10.5 N/mm²
530 %
39 N/mm
4 Hours @200°C

SPECIFICATIONS

Product Number	I.D. Ins. diameter		O.D. Outs. diameter		Wall		Working Pres. at 70°F (21.1°C)	
	(in.)	(mm.)	(in.)	(mm.)	(in.)	(mm.)	(PSI)	(Bar)
SPST-0010-0089-PE	0.010	0.25	0.089	2.25	0.039	1.00	87	6.00
SPST-0020-0039-PE	0.020	0.50	0.039	1.00	0.010	0.25	46	3.15
SPST-0020-0059-PE	0.020	0.50	0.059	1.50	0.020	0.50	87	5.97
SPST-0020-0098-PE	0.020	0.50	0.098	2.50	0.039	1.00	87	6.00
SPST-0020-0146-PE	0.020	0.50	0.146	3.70	0.063	1.60	87	6.00
SPST-0026-0104-PE	0.026	0.65	0.104	2.65	0.039	1.00	87	6.00
SPST-0031-0094-PE	0.031	0.80	0.094	2.40	0.031	0.80	87	5.97
SPST-0031-0157-PE	0.031	0.80	0.157	4.00	0.063	1.60	87	6.00
SPST-0039-0079-PE	0.039	1.00	0.079	2.00	0.020	0.50	46	3.15
SPST-0039-0118-PE	0.039	1.00	0.118	3.00	0.039	1.00	87	5.97
SPST-0039-0197-PE	0.039	1.00	0.197	5.00	0.079	2.00	87	6.00
SPST-0051-0130-PE	0.051	1.30	0.130	3.30	0.039	1.00	68	4.67
SPST-0059-0098-PE	0.059	1.50	0.098	2.50	0.020	0.50	32	2.20
SPST-0059-0122-PE	0.059	1.50	0.122	3.10	0.031	0.80	48	3.34
SPST-0059-0138-PE	0.059	1.50	0.138	3.50	0.039	1.00	59	4.09
SPST-0059-0177-PE	0.059	1.50	0.177	4.50	0.059	1.50	87	5.97
SPST-0079-0118-PE	0.079	2.00	0.118	3.00	0.020	0.50	25	1.73
SPST-0079-0157-PE	0.079	2.00	0.157	4.00	0.039	1.00	46	3.15
SPST-0079-0177-PE	0.079	2.00	0.177	4.50	0.049	1.25	56	3.85
SPST-0079-0197-PE	0.079	2.00	0.197	5.00	0.059	1.50	66	4.56
SPST-0098-0138-PE	0.098	2.50	0.138	3.50	0.020	0.50	21	1.45
SPST-0098-0161-PE	0.098	2.50	0.161	4.10	0.031	0.80	31	2.13
SPST-0098-0177-PE	0.098	2.50	0.177	4.50	0.039	1.00	37	2.58
SPST-0098-0224-PE	0.098	2.50	0.224	5.70	0.063	1.60	57	3.94
SPST-0098-0295-PE	0.098	2.50	0.295	7.50	0.098	2.50	87	5.97
SPST-0110-0189-PE	0.110	2.80	0.189	4.80	0.039	1.00	34	2.34
SPST-0118-0197-PE	0.118	3.00	0.197	5.00	0.039	1.00	32	2.20
SPST-0118-0276-PE	0.118	3.00	0.276	7.00	0.079	2.00	59	4.09
SPST-0126-0189-PE	0.126	3.20	0.890	4.80	0.031	0.80	25	1.73
SPST-0126-0205-PE	0.126	3.20	0.205	5.20	0.039	1.00	30	2.09
SPST-0126-0252-PE	0.126	3.20	0.252	6.40	0.063	1.60	46	3.15
SPST-0126-0283-PE	0.126	3.20	0.283	7.20	0.079	2.00	56	3.85
SPST-0126-0378-PE	0.126	3.20	0.378	9.60	0.126	3.20	87	5.97

SPECIFICATIONS

Product Number	I.D. Ins. diameter		O.D. Outs. diameter		Wall		Working Pres. at 70°F (21.1°C)	
	(in.)	(mm.)	(in.)	(mm.)	(in.)	(mm.)	(PSI)	(Bar)
SPST-0157-0236-PE	0.157	4.00	0.236	6.00	0.039	1.00	25	1.73
SPST-0157-0283-PE	0.157	4.00	0.283	7.20	0.063	1.60	37	2.58
SPST-0157-0315-PE	0.157	4.00	0.315	8.00	0.079	2.00	46	3.15
SPST-0157-0394-PE	0.157	4.00	0.394	10.00	0.118	3.00	66	4.56
SPST-0177-0303-PE	0.177	4.50	0.303	7.70	0.063	1.60	34	2.33
SPST-0189-0315-PE	0.189	4.80	0.315	8.00	0.063	1.60	32	2.20
SPST-0189-0441-PE	0.189	4.80	0.441	11.20	0.126	3.20	59	4.09
SPST-0189-0567-PE	0.189	4.80	0.567	14.40	0.189	4.80	87	5.97
SPST-0197-0276-PE	0.197	5.00	0.276	7.00	0.039	1.00	21	1.45
SPST-0197-0323-PE	0.197	5.00	0.323	8.20	0.063	1.60	31	2.13
SPST-0197-0449-PE	0.197	5.00	0.449	11.40	0.126	3.20	57	3.94
SPST-0217-0343-PE	0.217	5.50	0.343	8.70	0.063	1.60	28	1.96
SPST-0217-0413-PE	0.217	5.50	0.413	10.50	0.098	2.50	42	2.89
SPST-0236-0315-PE	0.236	6.00	0.315	8.00	0.039	1.00	18	1.26
SPST-0236-0374-PE	0.236	6.00	0.374	9.50	0.069	1.75	29	1.97
SPST-0236-0394-PE	0.236	6.00	0.394	10.00	0.079	2.00	32	2.20
SPST-0248-0311-PE	0.248	6.30	0.311	7.90	0.031	0.80	15	1.04
SPST-0248-0374-PE	0.248	6.30	0.374	9.50	0.063	1.60	25	1.76
SPST-0248-0445-PE	0.248	6.30	0.445	11.30	0.098	2.50	37	2.56
SPST-0248-0500-PE	0.248	6.30	0.500	12.70	0.126	3.20	46	3.19
SPST-0295-0374-PE	0.295	7.50	0.374	9.50	0.039	1.00	16	1.07
SPST-0295-0421-PE	0.295	7.50	0.421	10.70	0.063	1.60	22	1.53
SPST-0315-0441-PE	0.315	8.00	0.441	11.20	0.063	1.60	21	1.45
SPST-0315-0472-PE	0.315	8.00	0.472	12.00	0.079	2.00	25	1.73
SPST-0315-0512-PE	0.315	8.00	0.512	13.00	0.098	2.50	30	2.09
SPST-0315-0567-PE	0.315	8.00	0.567	14.40	0.126	3.20	37	2.58
SPST-0315-0630-PE	0.315	8.00	0.630	16.00	0.157	4.00	46	3.15
SPST-0335-0650-PE	0.335	8.50	0.650	16.50	0.157	4.00	43	2.98
SPST-0354-0551-PE	0.354	9.00	0.551	14.00	0.098	2.50	27	1.89
SPST-0374-0437-PE	0.374	9.50	0.437	11.10	0.031	0.80	12	0.80
SPST-0374-0500-PE	0.374	9.50	0.500	12.70	0.063	1.60	18	1.27
SPST-0374-0571-PE	0.374	9.50	0.571	14.50	0.098	2.50	26	1.81
SPST-0374-0626-PE	0.374	9.50	0.626	15.90	0.126	3.20	32	2.22

SPECIFICATIONS

Product Number	I.D. Ins. diameter		O.D. Outs. diameter		Wall		Working Pres. at 70°F (21.1°C)	
	(in.)	(mm.)	(in.)	(mm.)	(in.)	(mm.)	(PSI)	(Bar)
SPST-0374-0752-PE	0.374	9.50	0.752	19.10	0.189	4.80	46	3.18
SPST-0394-0551-PE	0.394	10.00	0.551	14.00	0.079	2.00	21	1.45
SPST-0394-0591-PE	0.394	10.00	0.591	15.00	0.098	2.50	25	1.73
SPST-0394-0646-PE	0.394	10.00	0.646	16.40	0.126	3.20	31	2.13
SPST-0500-0626-PE	0.500	12.70	0.626	15.90	0.063	1.60	15	1.03
SPST-0500-0752-PE	0.500	12.70	0.752	19.10	0.126	3.20	25	1.74
SPST-0500-0815-PE	0.500	12.70	0.815	20.70	0.157	4.00	30	2.10
SPST-0512-0866-PE	0.512	13.00	0.866	22.00	0.177	4.50	33	2.28
SPST-0630-0819-PE	0.630	16.00	0.819	20.80	0.094	2.40	17	1.17
SPST-0630-0882-PE	0.630	16.00	0.882	22.40	0.126	3.20	21	1.45
SPST-0630-1008-PE	0.630	16.00	1.008	25.60	0.189	4.80	29	2.02
SPST-0748-1000-PE	0.748	19.00	1.000	25.40	0.126	3.20	18	1.27
SPST-0748-1126-PE	0.748	19.00	1.126	28.60	0.189	4.80	25	1.75
SPST-0787-1039-PE	0.787	20.00	1.039	26.40	0.126	3.20	18	1.22
SPST-1000-1252-PE	1.000	25.40	1.252	31.80	0.126	3.20	15	1.03
SPST-1000-1378-PE	1.000	25.40	1.378	35.00	0.189	4.80	20	1.39
SPST-0866-1102-PE	0.866	22.00	1.102	28.00	0.118	3.00	16	1.09
SPST-0118-0236-PE	0.118	3.00	0.236	6.00	0.059	1.50	46	3.15
SPST-0102-0181-PE	0.102	2.60	0.181	4.60	0.039	1.00	36	2.49
SPST-0197-0433-PE	0.197	5.00	0.433	11.00	0.118	3.00	54	3.71
SPST-0236-0551-PE	0.236	6.00	0.551	14.00	0.157	4.00	59	4.09
SPST-0394-0709-PE	0.394	10.00	0.709	18.00	0.157	4.00	37	2.58
SPST-0394-0827-PE	0.394	10.00	0.83	21.00	0.217	5.50	50	3.43
SPST-0472-0630-PE	0.472	12.00	0.63	16.00	0.08	2.00	18	1.26
SPST-0630-0945-PE	0.630	16.00	0.94	24.00	0.16	4.00	25	1.73
SPST-0906-1220-PE	0.906	23.00	1.22	31.00	0.16	4.00	19	1.30
SPST-0748-1142-PE	0.748	19.00	1.14	29.00	0.20	5.00	26	1.81
SPST-0118-0433-PE	0.118	3.00	0.43	11.00	0.16	4.00	114	7.86

Similar Tubes

Medical grade silicone tubing

Silicone
Medical

Peroxide Cured Tube

SPST-PE

Silicone Tubing

Silicon

Silicone Peroxide Cured Tubing FDA

Silcon

The most outstanding properties of SILCON are its flexibility and resistance to temperature extremes. These, plus its good electrical properties and ability to self-extinguish, make SILCON an excellent choice for appliances and computers.

Peroxide-cured SILCON contains no sulfur or other acid-producing chemicals, thereby eliminating the possibility of staining, corroding, or deteriorating materials it contact. It is extremely resistant to ozone and U.V. over long time periods.

Care is recommended in the selection of fittings and clamps for SILCON as sharp barded fittings or unlined metal clamps could tear into the tubing wall and possibly cause a failure.

SILCON may be low pressure steam sterilized in-lined or autoclaved at up to 250°F in a normal autoclaving cycle. However, if exposed to repeated steam sterilization or long-term high temperature or pressure, silicone will eventually relax and become gummy. It should then be replaced. Colors for industrial applications are available through minimum order - call for details. SILCON is not recommended for implantable or in body uses or for continuous steam applications.



KEY FEATURES

- Raw materials meet FDA requirements per FDA 21 CFR 177.2600 for use with food contact surfaces
- Able to resist extreme temperature variation: -100°F to 500°F (350°F maximum for NSF applications)
- Translucent natural color for visual contact with the flow
- Resilient, stretchable, and resistant to compression set
- Reusable - will withstand repeated sterilization
- Odorless, tasteless, and inert
- Good electrical and weatherability properties - resists U.V., ozone, gases, and moisture
- Listed by the National Sanitation Foundation
- (NSF-51) for food equipment materials
- Free of BPA, latex and phthalates REACH and RoHS compliant



SPECIFICATIONS

Product Number	I.D. Ins. diameter (in.)	O.D. Outs. diameter (in.)	Standard Length (Ft)	Working Pres. at 70°F (21.1°C) (PSI)	LBS 100 ft
280 0084	1/16	1/8	100	10	0.50
280 0161	1/16	3/16	100	20	1.34
280 0315	3/32	5/32	100	10	0.66
280 0392	3/32	7/32	100	15	1.58
280 0469	1/8	3/16	100	10	0.88
280 0546	1/8	1/4	100	20	2.00
280 0623	1/8	5/16	100	25	3.32
280 0700	1/8	3/8	100	28	1.92
280 0854	5/32	9/32	100	20	2.14
280 0931	5/32	11/32	100	20	3.64
280 1008	3/16	1/4	100	5	1.22
280 1085	3/16	5/16	100	20	2.64
280 1162	3/16	3/8	100	20	4.12
280 1239	3/16	7/16	100	15	6.14
280 1393	1/4	5/16	100	10	1.50
280 1470	1/4	3/8	100	5	3.34
280 1547	1/4	7/16	100	20	5.12
280 1624	1/4	1/2	100	15	7.50

SPECIFICATIONS

Product Number	I.D. Ins. diameter (in.)	O.D. Outs. diameter (in.)	Standard Length (Ft)	Working Pres. at 70°F (21.1°C) (PSI)	LBS 100 ft
280 1778	5/16	7/16	100	10	3.66
280 1855	5/16	1/2	100	10	6.30
280 1932	3/8	1/2	100	10	4.32
280 2009	3/8	9/16	100	10	7.14
280 2086	3/8	5/8	100	10	10.16
280 2163	3/8	3/4	100	15	16.72
280 2240	7/16	5/8	100	10	7.70
280 2317	1/2	5/8	100	5	5.84
280 2394	1/2	11/16	100	5	9.50
280 2471	1/2	3/4	100	10	13.12
280 2548	1/2	7/8	100	10	15.00
280 2625	5/8	3/4	100	5	6.86
280 2702	5/8	13/16	100	5	11.34
280 2779	5/8	7/8	100	5	13.38
280 2856	5/8	1	100	10	22.86
280 3087	3/4	1	50	5	17.64
280 3164	3/4	1-1/8	50	10	26.56

Add length suffix to part number when ordering.

Example: 100 ft. of 1/16" I.D. x 1/8" O.D. tubing is part number 280 0084-100.

Working pressure are calculated from burst testing using a 3:1 safety factor. Application testing is recommended.

Bold indicates the critical dimension for fittings application.

PHYSICAL PROPERTIES**

● Hardness, Shore A±5	50
● Tensile Strength, psi	1444
● Elongation at Break, %	608
● Tear Resistance, Die B, ppi	125
● Modulus at 100%, psi	186
● Brittle Temperature, °F	-100
● Maximum Operating Temperature, °F	500
● Maximum Operating Temperature For NSF, °F	350

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

Similar Tubes

Medical grade silicone tubing

Silicone
Medical

Peroxide Cured Tube

SPST-PE

Silicone Tubing

Silicon