



Purity One™

Biopharmaceutical Grade Silicone Tubing

The Ideal Choice For:

- Sterile Filling and Transfer*
- Sampling*
- Pumping*
- Filtration*
- Single-Use Assemblies*
- Buffer + Media Prep + Processing*



Introduction

Purity One™ OneSil biopharmaceutical grade silicone tubing has been formulated for demanding and critical fluid transfer applications in biopharmaceutical processing.

Features

- Platinum Cured Silicone
- Hardness: 65D Shore A
- Moldable for single-use assemblies
- High Pressure Ratings
- Temperature Range
- No impaired taste or odor
- USP 665 Extractable Testing
- Extensive Validation Testing

Physical Properties

| Test Standard | ASTM Method | Test Result | |
|------------------------------|-------------|-------------|---------|
| | | Minimum | Maximum |
| Durometer Hardness (Shore A) | D2240 | 60 | 70 |
| Tensile Strength (psi) | D412 | 1200 | |
| Elongation, 100% | D412 | 250 | |
| Tensile Modulus (psi) | D412 | 350 | 550 |
| Tear Resistance (ppi) | D624 | 70 | |
| Compression Set (%) | D395 | | 30 |
| Specific Gravity | D792 | 1.15 | 1.19 |

Biocompatibility / Regulatory / Extractables

| Test Standard | Test Item | Test Result |
|---------------|---------------------------------------|------------------------|
| ISO 10993-4 | Hemolysis | Pass |
| ISO 10993-5 | Cytotoxicity | Pass |
| ISO 10993-11 | Acute Systemic Toxicity Tests | Pass |
| USP<85> | Bacterial Endotoxin Tests | Pass |
| USP<87> | Biological Reactivity Tests, in vitro | Pass |
| USP<88> | Biological Reactivity Tests, Class VI | Pass |
| USP<665> | Extractables | Available Upon Request |
| USP<788> | Particulate Testing | Pass |

Sterilization Method

| Test Standard | Test Result |
|-----------------------------------|-------------|
| High-Pressure Steam Sterilization | 131°C/20min |
| Gamma Irradiation Sterilization | Up to 50kGy |

Silicone Tubing

| PRODUCT NUMBER | I.D. | | O.D. | | WALL THICKNESS | | BURST PRESSURE AT 70°F (21.1°C) | | CUT LENGTHS | |
|---------------------|-------|------|-------|------|----------------|------|---------------------------------|-------|-------------|------|
| | (in.) | (mm) | (in.) | (mm) | (in.) | (mm) | (psi) | (bar) | (ft) | (m) |
| OneSil-65-0063-0125 | 0.063 | 1.6 | 0.125 | 3.2 | 0.032 | 0.8 | 125 | 8.62 | 50 | 15.2 |
| OneSil-65-0063-0188 | 0.063 | 1.6 | 0.188 | 5.0 | 0.063 | 1.6 | 131 | 9.03 | 50 | 15.2 |
| OneSil-65-0125-0188 | 0.125 | 3.2 | 0.188 | 5.0 | 0.032 | 0.8 | 61 | 4.21 | 50 | 15.2 |
| OneSil-65-0125-0250 | 0.125 | 3.2 | 0.250 | 6.4 | 0.063 | 1.6 | 110 | 7.58 | 50 | 15.2 |
| OneSil-65-0125-0313 | 0.125 | 3.2 | 0.313 | 8.0 | 0.094 | 2.4 | 134 | 9.24 | 50 | 15.2 |
| OneSil-65-0125-0375 | 0.125 | 3.2 | 0.375 | 9.5 | 0.125 | 3.2 | 160 | 11.00 | 50 | 15.2 |
| OneSil-65-0188-0313 | 0.188 | 4.8 | 0.313 | 8.0 | 0.063 | 1.6 | 80.5 | 5.55 | 50 | 15.2 |
| OneSil-65-0188-0375 | 0.188 | 4.8 | 0.375 | 8.0 | 0.094 | 2.4 | 101 | 6.96 | 50 | 15.2 |
| OneSil-65-0188-0438 | 0.188 | 4.8 | 0.438 | 11.1 | 0.125 | 3.2 | 105 | 7.24 | 50 | 15.2 |
| OneSil-65-0250-0375 | 0.250 | 6.4 | 0.375 | 8.0 | 0.063 | 1.6 | 62 | 4.27 | 50 | 15.2 |
| OneSil-65-0250-0438 | 0.250 | 6.4 | 0.438 | 11.1 | 0.094 | 2.4 | 88 | 6.07 | 50 | 15.2 |
| OneSil-65-0250-0500 | 0.250 | 6.4 | 0.500 | 12.7 | 0.125 | 3.2 | 92 | 6.34 | 50 | 15.2 |
| OneSil-65-0313-0500 | 0.313 | 8.0 | 0.500 | 12.7 | 0.094 | 2.4 | 76 | 5.24 | 50 | 15.2 |
| OneSil-65-0313-0563 | 0.313 | 8.0 | 0.563 | 14.3 | 0.125 | 3.2 | 93.5 | 6.45 | 50 | 15.2 |
| OneSil-65-0375-0500 | 0.375 | 9.5 | 0.500 | 12.7 | 0.063 | 1.6 | 45 | 3.10 | 50 | 15.2 |
| OneSil-65-0375-0563 | 0.375 | 9.5 | 0.563 | 14.3 | 0.094 | 2.4 | 58 | 4.00 | 50 | 15.2 |
| OneSil-65-0375-0625 | 0.375 | 9.5 | 0.625 | 15.9 | 0.125 | 3.2 | 74 | 5.10 | 50 | 15.2 |
| OneSil-65-0500-0750 | 0.500 | 12.7 | 0.750 | 19.1 | 0.125 | 3.2 | 60 | 4.14 | 50 | 15.2 |
| OneSil-65-0625-0875 | 0.625 | 15.9 | 0.875 | 22.2 | 0.125 | 3.2 | 49 | 3.38 | 50 | 15.2 |
| OneSil-65-0750-1000 | 0.750 | 19.1 | 1.000 | 25.4 | 0.125 | 3.2 | 46 | 3.17 | 50 | 15.2 |
| OneSil-65-0750-1125 | 0.750 | 19.1 | 1.125 | 28.6 | 0.188 | 4.8 | 53 | 3.65 | 50 | 15.2 |
| OneSil-65-1000-1375 | 1.000 | 25.4 | 1.375 | 34.9 | 0.188 | 4.8 | 49 | 3.38 | 50 | 15.2 |

Braid Reinforced Tubing

| PRODUCT NUMBER | I.D. | | O.D. | | WALL THICKNESS | | BURST PRESSURE AT 70°F (21.1°C) | | BEND RADIUS | | CUT LENGTHS | |
|---------------------|-------|------|-------|------|----------------|------|---------------------------------|-------|-------------|-------|-------------|------|
| | (in.) | (mm) | (in.) | (mm) | (in.) | (mm) | (psi) | (bar) | (in.) | (mm) | (ft) | (m) |
| OneSil-SB-0063-0275 | 0.063 | 1.6 | 0.275 | 7.0 | 0.106 | 2.7 | CF* | CF* | CF* | CF* | 50 | 15.2 |
| OneSil-SB-0125-0375 | 0.125 | 3.2 | 0.375 | 9.5 | 0.125 | 3.2 | 679 | 46.8 | 0.63 | 16.0 | 50 | 15.2 |
| OneSil-SB-0188-0438 | 0.188 | 4.8 | 0.438 | 11.1 | 0.125 | 3.2 | 729 | 50.3 | 0.63 | 16.0 | 50 | 15.2 |
| OneSil-SB-0250-0500 | 0.250 | 6.4 | 0.500 | 12.7 | 0.125 | 3.2 | 462 | 31.9 | 0.75 | 19.1 | 50 | 15.2 |
| OneSil-SB-0375-0625 | 0.375 | 9.5 | 0.625 | 15.9 | 0.125 | 3.2 | 521 | 35.9 | 1.25 | 31.8 | 50 | 15.2 |
| OneSil-SB-0500-0875 | 0.500 | 12.7 | 0.875 | 22.2 | 0.188 | 4.8 | 487 | 33.6 | 1.25 | 31.8 | 50 | 15.2 |
| OneSil-SB-0625-1000 | 0.625 | 15.9 | 1.000 | 25.4 | 0.188 | 4.8 | 517 | 35.7 | 1.88 | 47.8 | 50 | 15.2 |
| OneSil-SB-0750-1125 | 0.750 | 19.1 | 1.125 | 28.6 | 0.188 | 4.8 | 341 | 23.5 | 2.38 | 60.5 | 50 | 15.2 |
| OneSil-SB-1000-1405 | 1.000 | 25.4 | 1.405 | 35.7 | 0.203 | 5.2 | 310 | 21.4 | 4.41 | 112.0 | 50 | 15.2 |

*For information, please contact the factory directly.

Double Braid Reinforced Tubing

| PRODUCT NUMBER | I.D. | | O.D. | | WALL THICKNESS | | BURST PRESSURE AT 70°F (21.1°C) | | BEND RADIUS | | CUT LENGTHS | |
|---------------------|-------|-------|-------|------|----------------|------|---------------------------------|-------|-------------|------|-------------|------|
| | (in.) | (mm) | (in.) | (mm) | (in.) | (mm) | (psi) | (bar) | (in.) | (mm) | (ft) | (m) |
| OneSil-DB-0500-1000 | 0.500 | 12.7 | 1.000 | 25.4 | 0.250 | 6.4 | CF* | CF* | CF* | CF* | 50 | 15.2 |
| OneSil-DB-0750-1250 | 0.750 | 19.01 | 1.250 | 31.8 | 0.250 | 6.4 | CF* | CF* | CF* | CF* | 50 | 15.2 |
| OneSil-DB-1000-1500 | 1.000 | 25.4 | 1.500 | 38.1 | 0.250 | 6.4 | CF* | CF* | CF* | CF* | 50 | 15.2 |

*For information, please contact the factory directly.

Pump Tubing

| PRODUCT NUMBER | TUBING SIZE | I.D. | | O.D. | | WALL THICKNESS | | BURST PRESSURE AT 70°F (21.1°C) | | CUT LENGTHS | |
|--------------------|-------------|-------|------|-------|------|----------------|------|---------------------------------|-------|-------------|------|
| | | (in.) | (mm) | (in.) | (mm) | (in.) | (mm) | (psi) | (bar) | (ft) | (m) |
| OneSil-P-0032-0157 | 13 | 0.032 | 0.8 | 0.157 | 4.0 | 0.063 | 1.6 | 215 | 14.8 | 50 | 15.2 |
| OneSil-P-0047-0173 | - | 0.047 | 1.2 | 0.173 | 4.4 | 0.063 | 1.6 | 257.5 | 17.8 | 50 | 15.2 |
| OneSil-P-0063-0188 | 14 | 0.053 | 1.3 | 0.188 | 4.8 | 0.063 | 1.6 | 151 | 10.4 | 50 | 15.2 |
| OneSil-P-0094-0220 | - | 0.094 | 2.4 | 0.220 | 5.6 | 0.063 | 1.6 | 152 | 10.5 | 50 | 15.2 |
| OneSil-P-0094-0346 | - | 0.094 | 2.4 | 0.346 | 8.8 | 0.125 | 3.2 | 213 | 14.7 | 50 | 15.2 |
| OneSil-P-0125-0250 | 16 | 0.125 | 3.2 | 0.250 | 6.4 | 0.063 | 1.6 | 126 | 8.7 | 50 | 15.2 |
| OneSil-P-0125-0313 | - | 0.125 | 3.2 | 0.313 | 8.0 | 0.094 | 2.4 | 161 | 11.1 | 50 | 15.2 |
| OneSil-P-0188-0375 | 15 | 0.188 | 4.8 | 0.375 | 9.5 | 0.094 | 2.4 | 131 | 9.0 | 50 | 15.2 |
| OneSil-P-0250-0375 | 17 | 0.250 | 6.4 | 0.375 | 9.5 | 0.063 | 1.6 | 77.5 | 5.3 | 50 | 15.2 |
| OneSil-P-0250-0438 | 24 | 0.250 | 6.4 | 0.438 | 11.1 | 0.094 | 2.4 | 110 | 7.6 | 50 | 15.2 |
| OneSil-P-0375-0563 | 36 | 0.375 | 9.5 | 0.563 | 14.3 | 0.094 | 2.4 | 73.5 | 5.1 | 50 | 15.2 |
| OneSil-P-0375-0625 | 73 | 0.375 | 9.5 | 0.625 | 15.9 | 0.125 | 3.2 | 87 | 6.0 | 50 | 15.2 |
| OneSil-P-0500-0750 | 82 | 0.500 | 12.7 | 0.750 | 19.1 | 0.125 | 3.2 | 72 | 5.0 | 50 | 15.2 |
| OneSil-P-0750-1000 | 90 | 0.750 | 19.1 | 1.000 | 25.4 | 0.125 | 3.2 | 54 | 3.7 | 50 | 15.2 |
| OneSil-P-1000-1375 | - | 1.00 | 25.4 | 1.375 | 34.9 | 0.188 | 4.8 | 57 | 3.9 | 50 | 15.2 |

Purity One™ manufactures single-use and custom hose solutions that are critical to improving quality of life and overall wellness for people all around the world. With our combined technical expertise and cleanroom assembly capabilities, we focus on providing a level of service and quality-assurance that is unparalleled in the global life sciences, biopharmaceutical, and pharmaceutical industries.

195 Industrial Drive
Northampton MA 01060

(413)320-4650

sales@purityone.com

purityone.com



IMPORTANT: Users are accountable for verifying that Purity One™ products are appropriate and safe for their intended purposes, and that the materials used conform to all relevant medical regulatory standards. Purity One™ disclaims any liability for product failures resulting from the improper use of materials supplied, whether in the design, construction, or application of the products in which these materials are utilized.