



*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	In Progress
USP<788>	Particulate Testing	Pass

### Sterilization Method

Test Standard	Test Result
High-Pressure Steam Sterilization	121°C/30min
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	101.5	7.00	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.

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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.