



Purity and Temperature-resistance for demanding Applications

Large field of Applications

Laboratory, Analytic, Pharmaceutical-, Medical or Food/Beverage Industries, OPTU®sil Silicone-Tubing is, due to its properties, suitable for many demanding Applications. The smooth inner surface reduces the risk of particulate entrapment and microscopic buildup.

Good Resistance and suitable for high Temperatures

Resists Weathering and Aging, good Resistance against bases and diluted acids, therefore suitable for many Cleaning Agents. Especially for a Soft Tubing OPTU®sil Silicone withstands extreme Temperatures of -60°C to +200°C. It is autoclavable and physiologically safe. For use with up to +300°C we offer OPTU®sil Silicone HT-Tubing.

Regulatory OPTU®sil Silicone ST

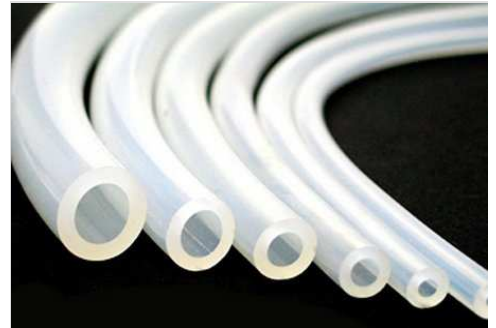
Meets BfR XV and FDA §177.2600. Dimension Tolerances according to DIN ISO 3302-1.

Eigenschaften OPTU®sil Silicone ISO

Especially for electrical insulation. Breakdown voltage approx. 18 kV/mm; Volume resistivity approx. $10^{15} \Omega \cdot \text{cm}$ (Specification VDE 0303)

Other Types on Request

Even low quantities (>100m depending on the dimensions), we offer custom made Types developed for your demands. Weather medical, produced in Clean room, platin-cured, extra soft or hard or simply in different colors,...please send us your request.



Features and Benefits

- meets FDA § 177.2600 & BfR XV
- for Temperatures from -60° C to +200°
- transparent/translucent
- taste and odor free
- autoclavable
- smooth inner surface
- physiologically safe

Typical Applications

- Food and Beverage
- Cosmetic production
- Analytic
- Medical- and Pharmaceutical
- electric Isolation of Hot Air

OPTU®sil Silicone Standard Sizes

part number	ID	OD	Wall	part number	ID	OD	Wall
SI0,3IS0,5	0,3 mm	0,5 mm	0,1 mm	SI2,0IS2,8	2,0 mm	2,8 mm	0,4 mm
SI0,3IS0,7	0,3 mm	0,7 mm	0,2 mm	SI2,0ST3,0	2,0 mm	3,0 mm	0,5 mm
SI0,5IS0,7	0,5 mm	0,7 mm	0,1 mm	SI2,0IS3,0	2,0 mm	3,0 mm	0,5 mm
SI0,5IS0,9	0,5 mm	0,9 mm	0,2 mm	SI2,0IS3,4	2,0 mm	3,4 mm	0,7 mm
SI0,5IS1,1	0,5 mm	1,1 mm	0,3 mm	SI2,0ST4,0	2,0 mm	4,0 mm	1,0 mm
SI0,5IS1,3	0,5 mm	1,3 mm	0,4 mm	SI2,0IS4,0	2,0 mm	4,0 mm	1,0 mm
SI0,5IS1,5	0,5 mm	1,5 mm	0,5 mm	SI2,0ST5,0	2,0 mm	5,0 mm	1,5 mm
SI0,5ST2,5	0,5 mm	2,5 mm	1,0 mm	SI2,0IS5,0	2,0 mm	5,0 mm	1,5 mm
SI0,5IS2,5	0,5 mm	2,5 mm	1,0 mm	SI2,0ST6,0	2,0 mm	6,0 mm	2,0 mm
SI0,7IS0,9	0,7 mm	0,9 mm	0,1 mm	SI2,5IS2,9	2,5 mm	2,9 mm	0,2 mm
SI0,7IS1,1	0,7 mm	1,1 mm	0,2 mm	SI2,5IS3,3	2,5 mm	3,3 mm	0,4 mm
SI0,7IS1,3	0,7 mm	1,3 mm	0,3 mm	SI2,5ST3,5	2,5 mm	3,5 mm	0,5 mm
SI0,7IS1,7	0,7 mm	1,7 mm	0,5 mm	SI2,5IS3,5	2,5 mm	3,5 mm	0,5 mm
SI0,7IS2,1	0,7 mm	2,1 mm	0,7 mm	SI2,5IS4,5	2,5 mm	4,5 mm	1,0 mm
SI0,8IS1,6	0,8 mm	1,6 mm	0,4 mm	SI2,5IS5,5	2,5 mm	5,5 mm	1,5 mm
SI1,0IS1,4	1,0 mm	1,4 mm	0,2 mm	SI2,5ST6,5	2,5 mm	6,5 mm	2,0 mm
SI1,0ST1,8	1,0 mm	1,8 mm	0,4 mm	SI3,0IS3,6	3,0 mm	3,6 mm	0,3 mm
SI1,0IS1,8	1,0 mm	1,8 mm	0,4 mm	SI3,0IS3,8	3,0 mm	3,8 mm	0,4 mm
SI1,0ST2,0	1,0 mm	2,0 mm	0,5 mm	SI3,0ST4,0	3,0 mm	4,0 mm	0,5 mm
SI1,0IS2,0	1,0 mm	2,0 mm	0,5 mm	SI3,0IS4,0	3,0 mm	4,0 mm	0,5 mm
SI1,0IS2,4	1,0 mm	2,4 mm	0,7 mm	SI3,0ST5,0	3,0 mm	5,0 mm	1,0 mm
SI1,0ST3,0	1,0 mm	3,0 mm	1,0 mm	SI3,0IS5,0	3,0 mm	5,0 mm	1,0 mm
SI1,0IS3,0	1,0 mm	3,0 mm	1,5 mm	SI3,0ST6,0	3,0 mm	6,0 mm	1,5 mm
SI1,0ST4,0	1,0 mm	4,0 mm	1,5 mm	SI3,0ST6,0	3,0 mm	6,0 mm	1,5 mm
SI1,0IS4,0	1,0 mm	4,0 mm	1,5 mm	SI3,0ST7,0	3,0 mm	7,0 mm	2,0 mm
SI1,2IS2,0	1,2 mm	2,0 mm	0,4 mm	SI3,0ST7,0	3,0 mm	7,0 mm	2,0 mm
SI1,3IS1,7	1,3 mm	1,7 mm	0,2 mm	SI3,5IS4,3	3,5 mm	4,3 mm	0,4 mm
SI1,5IS1,9	1,5 mm	1,9 mm	0,2 mm	SI3,5ST6,5	3,5 mm	6,5 mm	1,5 mm
SI1,5IS2,1	1,5 mm	2,1 mm	0,3 mm	SI4,0ST5,0	4,0 mm	5,0 mm	0,5 mm
SI1,5IS2,3	1,5 mm	2,3 mm	0,4 mm	SI4,0IS5,0	4,0 mm	5,0 mm	0,5 mm
SI1,5ST2,5	1,5 mm	2,5 mm	0,5 mm	SI4,0IS5,4	4,0 mm	5,4 mm	0,7 mm
SI1,5IS2,5	1,5 mm	2,5 mm	0,5 mm	SI4,0ST6,0	4,0 mm	6,0 mm	1,0 mm
SI1,5IS2,9	1,5 mm	2,9 mm	0,7 mm	SI4,0IS6,0	4,0 mm	6,0 mm	1,0 mm
SI1,5ST3,0	1,5 mm	3,0 mm	0,75 mm	SI4,0ST7,0	4,0 mm	7,0 mm	1,5 mm
SI1,5ST3,5	1,5 mm	3,5 mm	1,0 mm	SI4,0ST8,0	4,0 mm	8,0 mm	2,0 mm
SI1,5IS3,5	1,5 mm	3,5 mm	1,0 mm	SI4,0IS8,0	4,0 mm	8,0 mm	2,0 mm
SI2,0IS2,4	2,0 mm	2,4 mm	0,2 mm	SI4,0ST10,0	4,0 mm	10,0 mm	3,0 mm

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part number	ID	OD	Wall	part number	ID	OD	Wall
SI4,5ST5,5	4,5 mm	5,5 mm	0,5 mm	SI8,0IS11,0	8,0 mm	11,0 mm	1,5 mm
SI5,0ST6,0	5,0 mm	6,0 mm	0,5 mm	SI8,0ST12,0	8,0 mm	12,0 mm	2,0 mm
SI5,0IS6,0	5,0 mm	6,0 mm	0,5 mm	SI8,0IS12,0	8,0 mm	12,0 mm	2,0 mm
SI5,0ST7,0	5,0 mm	7,0 mm	1,0 mm	SI8,0ST14,0	8,0 mm	14,0 mm	3,0 mm
SI5,0IS7,0	5,0 mm	7,0 mm	1,0 mm	SI8,0ST16,0	8,0 mm	16,0 mm	4,0 mm
SI5,0ST8,0	5,0 mm	8,0 mm	1,5 mm	SI9,0IS10,4	9,0 mm	10,4 mm	0,7 mm
SI5,0IS8,0	5,0 mm	8,0 mm	1,5 mm	SI9,0IS11,0	9,0 mm	11,0 mm	1,0 mm
SI5,0ST9,0	5,0 mm	9,0 mm	2,0 mm	SI9,0IS12,0	9,0 mm	12,0 mm	1,5 mm
SI5,0IS9,0	5,0 mm	9,0 mm	2,0 mm	SI9,0ST13,0	9,0 mm	13,0 mm	2,0 mm
SI5,0ST10,0	5,0 mm	10,0 mm	2,5 mm	SI9,0IS13,0	9,0 mm	13,0 mm	2,0 mm
SI5,0ST11,0	5,0 mm	11,0 mm	3,0 mm	SI10,0ST12,0	10,0 mm	12,0 mm	1,0 mm
SI5,0ST13,0	5,0 mm	13,0 mm	4,0 mm	SI10,0IS12,0	10,0 mm	12,0 mm	1,0 mm
SI6,0ST7,0	6,0 mm	7,0 mm	0,5 mm	SI10,0ST13,0	10,0 mm	13,0 mm	1,5 mm
SI6,0IS7,0	6,0 mm	7,0 mm	0,5 mm	SI10,0IS13,0	10,0 mm	13,0 mm	1,5 mm
SI6,0ST8,0	6,0 mm	8,0 mm	1,0 mm	SI10,0ST14,0	10,0 mm	14,0 mm	2,0 mm
SI6,0ST8,0	6,0 mm	8,0 mm	1,0 mm	SI10,0IS14,0	10,0 mm	14,0 mm	2,0 mm
SI6,0ST9,0	6,0 mm	9,0 mm	1,5 mm	SI10,0ST15,0	10,0 mm	15,0 mm	2,5 mm
SI6,0IS9,0	6,0 mm	9,0 mm	1,5 mm	SI10,0IS15,0	10,0 mm	15,0 mm	2,5 mm
SI6,0ST10,0	6,0 mm	10,0 mm	2,0 mm	SI10,0ST16,0	10,0 mm	16,0 mm	3,0 mm
SI6,0IS10,0	6,0 mm	10,0 mm	2,0 mm	SI10,0ST18,0	10,0 mm	18,0 mm	4,0 mm
SI6,0ST12,0	6,0 mm	12,0 mm	3,0 mm	SI10,0ST20,0	10,0 mm	20,0 mm	5,0 mm
SI6,0IS12,0	6,0 mm	12,0 mm	3,0 mm	SI11,0ST15,0	11,0 mm	15,0 mm	2,0 mm
SI6,0ST14,0	6,0 mm	14,0 mm	4,0 mm	SI12,0ST14,0	12,0 mm	14,0 mm	1,0 mm
SI7,0IS8,0	7,0 mm	8,0 mm	0,5 mm	SI12,0IS14,0	12,0 mm	14,0 mm	1,0 mm
SI7,0ST8,4	7,0 mm	8,4 mm	0,7 mm	SI12,0ST16,0	12,0 mm	16,0 mm	2,0 mm
SI7,0IS8,4	7,0 mm	8,4 mm	0,7 mm	SI12,0IS16,0	12,0 mm	16,0 mm	2,0 mm
SI7,0ST9,0	7,0 mm	9,0 mm	1,0 mm	SI12,0ST18,0	12,0 mm	18,0 mm	3,0 mm
SI7,0IS9,0	7,0 mm	9,0 mm	1,0 mm	SI12,0ST20,0	12,0 mm	20,0 mm	4,0 mm
SI7,0ST10,0	7,0 mm	10,0 mm	1,5 mm	SI13,0ST17,0	13,0 mm	17,0 mm	2,0 mm
SI7,0IS10,0	7,0 mm	10,0 mm	1,5 mm	SI13,0ST19,0	13,0 mm	19,0 mm	3,0 mm
SI7,0ST11,0	7,0 mm	11,0 mm	2,0 mm	SI14,0IS16,0	14,0 mm	16,0 mm	1,0 mm
SI7,0IS11,0	7,0 mm	11,0 mm	2,0 mm	SI14,0IS18,0	14,0 mm	18,0 mm	2,0 mm
SI7,0ST13,0	7,0 mm	13,0 mm	3,0 mm	SI14,0ST20,0	14,0 mm	20,0 mm	3,0 mm
SI8,0IS9,0	8,0 mm	9,0 mm	0,5 mm	SI15,0IS17,0	15,0 mm	17,0 mm	1,0 mm
SI8,0IS9,4	8,0 mm	9,4 mm	0,7 mm	SI15,0ST19,0	15,0 mm	19,0 mm	2,0 mm
SI8,0ST10,0	8,0 mm	10,0 mm	1,0 mm	SI15,0IS19,0	15,0 mm	19,0 mm	2,0 mm
SI8,0IS10,0	8,0 mm	10,0 mm	1,0 mm	SI15,0ST21,0	15,0 mm	21,0 mm	3,0 mm
SI8,0ST11,0	8,0 mm	11,0 mm	1,5 mm	SI15,0ST25,0	15,0 mm	25,0 mm	5,0 mm

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part number	ID	OD	Wall	part number	ID	OD	Wall
SI16,0IS18,0	16,0 mm	18,0 mm	1,0 mm	SI22,0ST26,0	22,0 mm	26,0 mm	2,0 mm
SI16,0ST20,0	16,0 mm	20,0 mm	2,0 mm	SI22,0ST30,0	22,0 mm	30,0 mm	4,0 mm
SI16,0IS20,0	16,0 mm	20,0 mm	2,0 mm	SI25,0IS27,0	25,0 mm	27,0 mm	1,0 mm
SI16,0ST22,0	16,0 mm	22,0 mm	3,0 mm	SI15,0IS29,0	25,0 mm	29,0 mm	2,0 mm
SI16,0ST24,0	16,0 mm	24,0 mm	4,0 mm	SI25,0ST27,0	25,0 mm	27,0 mm	1,0 mm
SI17,0ST25,0	17,0 mm	25,0 mm	4,0 mm	SI25,0ST29,0	25,0 mm	29,0 mm	2,0 mm
SI18,0IS20,0	18,0 mm	20,0 mm	1,0 mm	SI25,0ST31,0	25,0 mm	31,0 mm	3,0 mm
SI18,0ST22,0	18,0 mm	22,0 mm	2,0 mm	SI25,0ST33,0	25,0 mm	33,0 mm	4,0 mm
SI18,0IS22,0	18,0 mm	22,0 mm	2,0 mm	SI25,0ST35,0	25,0 mm	35,0 mm	5,0 mm
SI18,0ST24,0	18,0 mm	24,0 mm	3,0 mm	SI25,0ST37,0	25,0 mm	37,0 mm	6,0 mm
SI19,0ST25,0	19,0 mm	25,0 mm	3,0 mm	SI30,0ST36,0	30,0 mm	36,0 mm	3,0 mm
SI19,0ST27,0	19,0 mm	27,0 mm	4,0 mm	SI30,0ST40,0	30,0 mm	40,0 mm	5,0 mm
SI20,0ST22,0	20,0 mm	22,0 mm	1,0 mm	SI32,0ST36,0	32,0 mm	36,0 mm	2,0 mm
SI20,0IS22,0	20,0 mm	22,0 mm	1,0 mm	SI32,0IS36,0	32,0 mm	36,0 mm	2,0 mm
SI20,0IS24,0	20,0 mm	24,0 mm	2,0 mm	SI32,0ST38,0	32,0 mm	38,0 mm	3,0 mm
SI20,0ST26,0	20,0 mm	26,0 mm	3,0 mm	SI35,0ST45,0	35,0 mm	45,0 mm	5,0 mm
SI20,0ST27,0	20,0 mm	27,0 mm	3,5 mm	SI40,0ST50,0	40,0 mm	50,0 mm	5,0 mm
SI20,0ST28,0	20,0 mm	28,0 mm	4,0 mm	SI45,0ST55,0	45,0 mm	55,0 mm	5,0 mm
SI20,0ST30,0	20,0 mm	30,0 mm	5,0 mm	SI50,0ST60,0	50,0 mm	60,0 mm	5,0 mm

OPTU®sil Silicone Pressure Standard Sizes

part number	ID	OD	Wall	Max. Working- Pressure* 22°C (73°F)	Burst- Pressure* 22°C (73°F)
SI3,0DT9,0	3,0 mm	9,0 mm	3,0 mm	12 bar	60 bar
SI4,0DT9,4	4,0 mm	9,4 mm	2,7 mm	-	-
SI4,0DT10,0	4,0 mm	10,0 mm	3,0 mm	12 bar	60 bar
SI5,0DT11,0	5,0 mm	11,0 mm	3,0 mm	8 bar	40 bar
SI6,0DT12,0	6,0 mm	12,0 mm	3,0 mm	7 bar	35 bar
SI8,0DT15,0	8,0 mm	15,0 mm	3,5 mm	5 bar	25 bar
SI10,0DT17,0	10,0 mm	17,0 mm	3,5 mm	5 bar	25 bar
SI12,5DT19,5	12,5 mm	19,5 mm	3,5 mm	5 bar	25 bar
SI14,0DT22,0	14,0 mm	22,0 mm	4,0 mm	4,4 bar	22 bar
SI16,0DT26,0	16,0 mm	26,0 mm	5,0 mm	4,4 bar	22 bar
SI19,0DT30,0	19,0 mm	30,0 mm	5,5 mm	4 bar	20 bar
SI25,0DT37,0	25,0 mm	37,0 mm	6,0 mm	3 bar	15 bar

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599

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Typical Physical Properties of OPTU®sil Silicone-Tubing

Property	OPTU®sil Silicone ST	OPTU®sil Silicone Pressure	OPTU®sil Silicone Pressure red	OPTU®sil Silicone Iso	OPTU®sil Silicone STS
Hardness	60° Shore A	70° Shore A	70° Shore A	60° Shore A	55° Shore A
Color	translucent	translucent	Inner translucent outer red	translucent	translucent
Working Temperature	-60° C to +200°	-60° C to +200°	-60° C to +180°	-60° C to +200°	-60° C to +200°
Specific Gravity	1,2 g/cm ³	1,13 g/cm ³	1,16 g/cm ³	1,19 g/cm ³	1,15 g/m ³
Tensile Strength	11 N/mm ²	10 N/mm ²	11,3 N/mm ²	-	
Ultimate Elongation	545,00%	430,00%	500,00%	≥300%	520,00%
Tear Propagation Strength	24 N/mm	21 N/mm	25 N/mm	-	19 N/mm
Compression set Constant Deflection, 22 hrs. @ 175°C	35,00%	35,00%	35,00%	-	45,00%
Breakdown voltage	~18 kV/mm	-	-	~18 kV/mm	-
Volume resistivity	~10 ¹⁵ Ω*cm	-	-	~10 ¹⁵ Ω*cm	-

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