

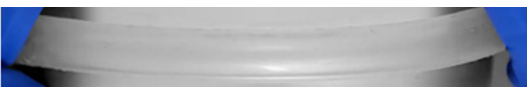
Sani-Tech® STHT®-LT Silicone Tubing for Low Temperature Applications

Sani-Tech® STHT®-LT is a platinum-cured silicone tubing designed specifically for applications requiring very low temperatures. Traditional tubing products become brittle and prone to damage in very cold conditions, leading to costly failures and product loss in critical cold storage, freeze/thaw, fill/finish, or cold chain applications. STHT®-LT has been designed to solve this problem. With a glass transition temperature of -114°C and a brittleness by impact temperature lower than -90°C, STHT®-LT remains flexible and crush-resistant in the coldest environments.

Traditional Tubing



Sani-Tech® STHT®-LT Tubing



Historically, only fluoropolymer tubing products could remain flexible and crush-resistant at very low temperatures. However, with increasing regulatory pressure and restrictions on Per- and PolyFluoroAlkyl Substances (PFAS), the industry is actively seeking alternative materials. STHT®-LT is produced without any fluoropolymers, making it a unique, high-performance silicone tubing that delivers low-temperature capabilities and alignment with regulatory standards.

Sani-Tech® STHT®-LT is designed for easy incorporation into your single-use systems. The tubing is fully compatible with the full range of hose barbs, retainers, and connectors common to mechanical assemblies. It is also fully overmoldable, making it simple to integrate into tubing, bag, or bottle assemblies.

Features / Benefits

- Flexible down to -114°C
- Crush-resistant down to -114°C
- Lower risk of cold chain failures
- No fluoropolymers
- Full extractables report per BioPhorum Operations Group (BPOG) protocol
- [Technical dossier available](#)
- Available with ValPlus™ certification (See page 3 for more details)

Typical Applications

- Cold storage
- Cold chain logistics
- Freeze/thaw
- Fill finish

Biocompatible and Regulatory Compliant

ADCF/BSE/TSE statements

USP <88> Class VI, and/or USP <87>, and/or ISO 10993-5

EP 3.1.9

Sani-Tech® STHT-LT Tubing Standard Sizes

Part Number	ID		OD		Wall		Burst Pressure	
	in	mm	in	mm	in	mm	psi	bar
STHTLT-031-1	0.031	0.8	0.094	2.4	0.031	0.8	135*	9.3*
STHTLT-063-2	0.063	1.6	0.188	4.8	0.063	1.6	122	8.4
STHTLT-094-3	0.094	2.4	0.281	7.1	0.094	2.4	122	8.4
STHTLT-M3-6	0.118	3.0	0.236	6.0	0.059	1.5	80	5.5
STHTLT-125-2	0.125	3.2	0.250	6.4	0.063	1.6	80	5.5
STHTLT-125-4	0.125	3.2	0.375	9.5	0.125	3.2	122	8.4
STHTLT-188-3	0.188	4.8	0.375	9.5	0.094	2.4	68*	4.7*
STHTLT-250-2	0.250	6.4	0.375	9.5	0.063	1.6	44*	3.0*
STHTLT-250-3	0.250	6.4	0.438	11.1	0.094	2.4	63	4.3
STHTLT-250-4	0.250	6.4	0.500	12.7	0.125	3.2	80	5.5
STHTLT-375-4	0.375	9.5	0.625	15.9	0.125	3.2	56	3.8
STHTLT-500-4	0.500	12.7	0.750	19.1	0.125	3.2	42*	2.9*

Standard coil length is 25 feet. 50 foot coils available by adding "F" to the end of the part number. 100 foot coils available by adding "H" to the end of the part number.

Burst pressures are estimated based on testing following ASTM D1599 under controlled conditions. The pressure results above may vary from application to application and therefore the above results are not guaranteed.

* Actual tested burst pressure

Some part numbers may be subject to a minimum order quantity.

Typical Physical Properties

Property	ASTM Method	Target Value
Durometer Hardness, Shore A	D2240	65
Tensile Strength, psi (MPa)	D412	1500 (10.34)
Elongation, %	D412	500
Specific Gravity	D792	1.19

Unless otherwise noted, all tests were conducted at controlled room temperature.

Values shown were determined on 2mm or 0.078" thick molded ASTM plaques or molded ASTM durometer buttons.

Sterilization Methods

- Autoclavable
- Irradiation (gamma and x-ray) - up to 50 kGy
- Gas - ethylene oxide



ValPlus™ Certification

Mitigate risk and add value to your production with ValPlus™, an industry-first advanced tubing validation program. ValPlus™ offers a higher level of quality assurance by validating the fluid path of the tubing to ensure a reliable and sterile single-use fluid handling component. Our process focuses on validating the fluid path of the tubing, not on washing the tubes themselves. This validation is done through a single, normal ANSI Level II sampling plan that meets the following standard industry requirements:

- USP <788> for Sub-visible Particulates
- USP <85> and <161> for Endotoxins
- ISO 11737-1 for Bioburden

For more information on ValPlus™, please visit www.biopharm.saint-gobain.com/valplus

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