

Saint-Gobain Life Sciences -**Bioprocess Solutions**



Sani-Tech[®] STHT[®]-80 Silicone Tubing for **High Pressure Applications**

Sani-Tech® STHT®-80 is a premium platinum-cured silicone tubing designed for high burst pressure and vacuum applications. This high-durometer tubing surpasses typical silicone tubing in pressure resistance, eliminating the need for costly braid reinforcements in some cases. STHT®-80 offers best-in-class performance, achieving the highest burst pressure ratings among comparable products, while remaining vacuumcompatible and cost-effective.



Burst Pressure (psi) of Sani-Tech[®] STHT[®]-80 vs Typical Non-Braided Tubing

with identical ID's and OD's

Features / Benefits

- Higher burst pressure than typical fluid transfer tubing
- Increased flow rates
- Does not collapse in vacuum conditions
- High level of transparency
- Reduces pulsation downstream of pumping
- Full extractables report per BioPhorum Operations Group (BPOG) protocol
- Technical dossier available
- Available with ValPlus[™] certification

Typical Applications

- Fill finish fluid transfer
- Pressurized fluid transfer
- Hydrostatic pressure from large stainless steel vessels
- Sterile filtration integrity test / PUPSIT
- High-viscosity concentrated flow streams





Burst Pressure (psi) of Sani-Tech[®] STHT[®]-80 vs Competitor High Pressure Silicone Tubing

Based on physically testing burst pressure of tubing samples (ASTM D1599) with 0.25" ID and 0.375" OD

Some applications, such as fill-finish operations, require fluid transfer systems that minimize pulsations downstream of pumping. STHT[®]-80 delivers two to three times less pulsation than competing high durometer tubings. Less pulsation can aid in achieving very high filling and dosing accuracy while avoiding unintended loss of fluid at the filling needle.

	Saint-Gobain	Silicone	Silicone
	STHT®-80	Tube A	Tube B
Pulsation	3%	7%	9%

Tubing size tested: 0.25" ID x 0.375" OD

Measured as % increase in width indicated by calipers attached to tubing downstream of pump before and after pumping at 300rpm at 60psi back pressure

Many tubings, especially braid-reinforced products, are opaque and difficult to see through. STHT®-80 tubing offers a high level of transparency for easy visual identification of activity within the fluid path. This property greatly assists in applications which require visual cues and observation for success.



Biocompatible and Regulatory Compliant

Sani-Tech® STHT®-80 is manufactured in an ISO Class 7 cleanroom from platinum-cured silicone materials and tested to a variety of specifications, including the items below. For additional compliance data visit www.biopharm.saint-gobain.com to download the Technical Dossier or contact our customer service department.

ADCF/BSE/TSE statements
USP <88> Class VI, and/or USP <87>, and/or ISO 10993-5
EP 3.1.9
EP 3.1.9

Sani-Tech® STHT®-80 Standard Sizes

									Minimur	n Bend	Vacuum
Part Number	IC)	0)	Wa		Burst P	ressure	Rad	ius	Rating
	in	mm	in	mm	in	mm	psi	bar	in	mm	inHg
STHT80-031-1	0.031	0.8	0.094	2.4	0.031	0.8	510	35.2	0.210	5.3	> 29.9
STHT80-031-2	0.031	0.8	0.156	4.0	0.063	1.6	636	43.8	0.340	8.6	> 29.9
STHT80-063-2	0.063	1.6	0.188	4.8	0.063	1.6	504	34.7	0.280	7.1	> 29.9
STHT80-063-3	0.063	1.6	0.250	6.4	0.094	2.4	593	40.9	0.240	6.1	> 29.9
STHT80-125-2	0.125	3.2	0.250	6.4	0.063	1.6	319	22.0	0.220	5.6	> 29.9
STHT80-125-3	0.125	3.2	0.313	8.0	0.094	2.4	431	29.7	0.150	3.8	> 29.9
STHT80-125-4	0.125	3.2	0.375	9.5	0.125	3.2	506	34.9	0.230	5.8	> 29.9
STHT80-188-2	0.188	4.8	0.313	8.0	0.063	1.6	257	17.7	0.430	10.9	> 29.9
STHT80-188-3	0.188	4.8	0.375	9.5	0.094	2.4	353	24.3	0.340	8.6	> 29.9
STHT80-188-4	0.188	4.8	0.438	11.1	0.125	3.2	421	29.0	0.280	7.1	> 29.9
STHT80-250-2	0.250	6.4	0.375	9.5	0.063	1.6	201	13.9	0.700	17.8	> 29.9
STHT80-250-3	0.250	6.4	0.438	11.1	0.094	2.4	281	19.4	0.540	13.7	> 29.9
STHT80-250-4	0.250	6.4	0.500	12.7	0.125	3.2	334	23.0	0.420	10.7	> 29.9
STHT80-313-3	0.313	8.0	0.500	12.7	0.094	2.4	216	14.9	0.870	22.1	> 29.9
STHT80-313-4	0.313	8.0	0.563	14.3	0.125	3.2	294	20.3	0.660	16.8	> 29.9
STHT80-375-2	0.375	9.5	0.500	12.7	0.063	1.6	140	9.7	1.380	35.1	> 29.9
STHT80-375-3	0.375	9.5	0.563	14.3	0.094	2.4	208	14.3	1.080	27.4	> 29.9
STHT80-375-4	0.375	9.5	0.625	15.9	0.125	3.2	266	18.3	0.880	22.4	> 29.9
STHT80-500-3	0.500	12.7	0.688	17.5	0.094	2.4	163	11.2	1.720	43.7	> 29.9
STHT80-500-4	0.500	12.7	0.750	19.1	0.125	3.2	204	14.1	1.390	35.3	> 29.9
STHT80-500-5	0.500	12.7	0.875	22.2	0.188	4.8	282	19.4	1.260	32.0	> 29.9
STHT80-625-4	0.625	15.9	0.875	22.2	0.125	3.2	171	11.8	2.150	54.6	> 29.9
STHT80-625-5	0.625	15.9	1.000	25.4	0.188	4.8	230	15.9	1.750	44.5	> 29.9
STHT80-750-4	0.750	19.1	1.000	25.4	0.125	3.2	128	8.8	2.930	74.4	> 29.9
STHT80-750-5	0.750	19.1	1.125	28.6	0.188	4.8	173	11.9	2.450	62.2	> 29.9
STHT80-875-5	0.875	22.2	1.250	31.8	0.188	4.8	180	12.4	3.100	78.7	> 29.9
STHT80-1000-5	1.000	25.4	1.375	34.9	0.188	4.8	146	10.1	3.670	93.2	> 29.9

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 pressure test method is ASTM D1599; test media is water. Many factors can reduce or increase the tubing's ability to withstand pressure. All part numbers have been physically tested for burst pressure, bend radius and vacuum resistance; no estimates or mathematically predicted values are used.

It is imperative that the user conducts tests simulating the conditions of application prior to specifying the tubing for use.

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

Typical Physical Properties

Property	ASTM Method	Target Value
Durometer Hardness, Shore A	D2240	83 nominal
Tensile Strength, psi	D412	>700
Elongation, %	D412	>300
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.

General Sterilization Methods

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

ValPlus[™] Certification

ValPlus[™] provides customers with an industry first opportunity to mitigate risk and add value into their production process steps. This enhanced level of tubing validation certification offers a higher level of quality assurance in single-use fluid handling components. Saint-Gobain Life Sciences validates the fluid path of the tubing using a single, normal ANSI Level II sampling plan to meet 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 <u>www.biopharm.saint-gobain.com/valplus</u>

Uncontrolled Document - for the controlled version of this document please visit <u>www.biopharm.saint-gobain.com</u>

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For registered access to Saint-Gobain Product Validation Summaries, CLICK HERE

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics products for all intended uses and that the materials to be used comply with all applicable medical regulatory requirements. Saint-Gobain Performance Plastics assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

WARRANTY: For a period of 12 months from the date of first sale, Saint-Gobain Performance Plastics warrants this product to be free of defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof.

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