

Sani-Tech® STHT™-WR Wire-Reinforced Silicone Hose



Sani-Tech® STHT™-WR is an ultra-flexible, high-pressure, platinum-cured silicone hose.

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Sani-Tech® STHT™-WR platinum-cured silicone, wire-reinforced hose, constructed of multi-ply reinforcement and 316L SS helical wire, provides unsurpassed flexibility while maintaining high-pressure ratings with full vacuum capabilities. Sani-Tech® STHT™-WR is manufactured with an ultra-pure, biopharmaceutical-grade silicone to ensure your process integrity.

Characteristics

The manufacturing process is carefully controlled from receiving through production. Inspection and lot traceability is readily accessible as batch numbers are assigned. All packages are identified by external labeling on both the bag and the high-quality, crush-proof box.

Saint-Gobain Performance Plastics' manufacturing facility has the ability to create a variety of unique color-coding systems for your particular application needs. STHT™-WR is available in custom-coded coloring.

Biocompatibility

Sani-Tech® STHT™-WR is manufactured from the finest grade of silicone materials and is fully characterized, validated and tested to a variety of specifications including USP Class VI criteria, ISO 10993 and European Pharmacopoeia 3.1.9. Sani-Tech® STHT™-WR platinum-cured braid-reinforced silicone hose has a masterfile with the U.S. Food and Drug Administration. For additional compliance data, please review characterization information on the back page.

biopharmaceutical products

Platinum-Cured Wire-Reinforced Silicone Hose

Features/Benefits

- Biopharmaceutical grade
- Ultra-flexible bend radius
- Available in 25-foot standard lengths
- Unsurpassed inner surface smoothness
- Autoclavable and sterilizable
- Temperature range from -80°F (-62°C) to 500°F (260°C)
- Imparts no taste or odor
- Custom color-coding available
- Meets all USP Class VI, EP 3.1.9 FDA and ISO criteria
- High-pressure and vacuum rating

Typical Applications

- Biopharmaceutical manufacturing
- Pharmaceutical processing and production
- Vacuum pump applications
- Bulk transfer
- Load cell
- Bioreactor process lines
- Production fermentation

Connections

- Sanitary, non-metallic fittings
- Radially crimped 316L SS or non-metallic fittings
- Adapter connections

Sani-Tech® STHT™-WR Hose Inventory Sizes

Part Number	ID Inches (mm)	OD Inches (mm)	Wall Inches	Maximum Working Pressure PSI at 68°F	Minimum Burst Pressure PSI at 68°F	Minimum Bend Radius Inches	Weight Per Foot Lb.	Vacuum Rating IN. HG
STHT-WR-0500	.500 (12.70)	.920 (23.37)	.210	150	600	1.5	.25	29.9
STHT-WR-0750	.750 (19.05)	1.190 (30.23)	.220	125	500	2.5	.36	29.9
STHT-WR-1000	1.000 (25.40)	1.450 (36.83)	.225	125	500	4.0	.48	29.9
STHT-WR-1500	1.500 (38.10)	2.160 (54.86)	.330	125	500	5.5	1.00	29.9
STHT-WR-2000	2.000 (50.80)	2.690 (68.33)	.345	100	400	7.0	1.25	29.9

NOTE: Burst pressure will decrease by 5% for each 200°F (93°C) increase up to 500°F (260°C) maximum pressure for STHT™-WR. The diameter measurements are nominal values.

Characterization

The biocompatibility of STHT™ platinum-cured silicone hose, manufactured with Sani-Tech® silicone, has been tested and complies with the parameters set forth in the following test protocols:

- USP XXIV (88) biological reactivity, in vivo
 - Intracutaneous test, Systemic injection test, Implantation test
- USP XXIV (87) biological reactivity, in vitro
 - L929 MEM elution, AGAR diffusion
- ISO 10993
- FDA CFR 177.2600
- Meets or exceeds USDA standard and 3A approval
- European Pharmacopoeia 3.1.9

Sterilization Methods

- Autoclavable
- Radiation - up to 2.5 Mrad (25 Kilogray)
- Gas - Ethylene Oxide

NOTE: STHT™ hose will not deteriorate with repeated autoclaving. This method of sterilization is strongly recommended. STHT silicones should not be considered for consistent steam applications.

WARNING: Do not use STHT silicone hose in hot oil or acid applications.

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240	65
Tensile Strength psi (MPa)	D412	1291
Ultimate Elongation, 100%	D412	693
Tear Resistance lb-f/inch (kN/m)	D624	329
Specific Gravity	D792	1.19
Tensile Modulus	D412	351

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

SANI-TECH® HOSE IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

Distributed By:

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biopharmaceutical products

Come through clean.™

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IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

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