

Sani-Tech® Ultra-HP High Purity Hose



Sani-Tech® Ultra-HP Platinum-Cured Wire-Reinforced Silicone Hose with FEP Liner

Sani-Tech® Ultra-HP hose is constructed with multiple layers of reinforced Sani-Tech® Ultra platinum-cured silicone, 316L stainless steel helical wire reinforcement and a PharmaFluor® FEP liner. The FEP liner is fully bonded to the silicone hose utilizing patented bonding technology, providing a high purity fluid path. The smooth inner bore surface ensures both optimal flow and ease of cleaning and sanitization. Light weight and exceptional flexibility make this hose extremely user-friendly. State-of-the-art manufacturing techniques ensure tight dimensional tolerances, making assembly a simple process.

Characteristics

PharmaFluor® FEP liner maintains fluid integrity and low binding characteristics, low TOCs, extractables and leachables. The body and jacket of the hose are constructed with Sani-Tech® Ultra platinum-cured silicone. Sani-Tech® Ultra formulations are manufactured in a certified clean room from the finest grade of silicone materials.

Biocompatibility

Sani-Tech® Ultra-HP hose is constructed utilizing 100% USP Class VI compliant materials to provide further security and minimize the risk of contamination. These materials are fully characterized, documented and certified per USP <88>, USP <87>, EP 3.1.9, ISO 10993, FDA 21 CFR 177.2600 and FDA 21 CFR 177.1550.

BIOPHARMACEUTICAL PRODUCTS

Platinum-Cured Wire-Reinforced Silicone Hose with Fully Bonded PharmaFluor® FEP Liner

ULTRA-SMOOTH, ULTRA-PURE

Features/Benefits

- Smooth inner bore for improved cleaning and sanitization
- Fluoropolymer liner minimizes binding of biological materials
- High purity materials with low TOCs, extractables and leachables
- Broad chemical resistance
- Light weight and flexible
- Low force to bend
- Simple assembly procedure
- Temperature rating -65°F (-54°C) to 350°F (177°C)
- Available in 12 foot lengths

Typical Applications

- Bioprocessing
- Load cells
- Product transfer
- SIP/CIP

Connections

- BPE compliant 316L Stainless Steel PermaSeal® sanitary fittings – standard
- Non-metallic fittings – optional

Hose Identification System

- Optional SANIseal™ silicone hose labeling
- Optional laser marking on crimp collar

Sani-Tech® Ultra-HP High Purity Hose Inventory Sizes

Part Number	Nominal ID Inches (mm)	Nominal OD Inches (mm)	Nominal Wall Inches (mm)	Maximum Working Pressure PSI at 68°F	Minimum Bend Radius Inches	Weight Per Foot, Lbs.	Vacuum Rating in. Hg
STHT-HP-0500	0.5 (13)	0.8 (21)	0.16 (4)	150	2.25	0.30	29.9
STHT-HP-0750	0.75 (19)	1.0 (27)	0.16 (4)	150	3.50	0.39	29.9
STHT-HP-1000	1.0 (25)	1.5 (38)	0.25 (6)	150	5.00	0.43	29.9
STHT-HP-1500	1.5 (38)	2.0 (51)	0.25 (6)	150	7.00	0.72	29.9
STHT-HP-2000	2.0 (51)	2.5 (64)	0.25 (6)	150	10.50	1.10	29.9

Recommend working pressure is based on a 1 to 4 working to minimum burst pressure

Typical Physical Properties (PharmaFluor® FEP Liner)

Property	ASTM Method	Value or Rating
Durometer Hardness Shore D	D2240	55
Elongation @ 73°F	D638	275%
Low Temperature Embrittlement, °F (°C)	D746	-100 (-73)
Specific Gravity	D792	2.17
Chemical Resistance – strong or weak acids – strong or weak alkalis – solvents or fuels	D471	excellent excellent excellent
Moisture Absorption, %	D570	<0.01%

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.

Characterization

The bio-compatibility of Sani-Tech® Ultra-HP high purity hose, manufactured with Sani-Tech® Ultra silicone and PharmaFluor® FEP liner, has been tested and complies with the parameters set forth in the following test protocols:

- USP <88> (USP class VI) biological reactivity, in vivo
 - Intracutaneous test
 - Systemic injection test
 - Implantation test
- USP <87> biological reactivity, in vitro
 - L929 MEM elution
 - AGAR diffusion
- ISO 10993
- FDA 21 CFR 177.2600 and FDA 21 CFR 177.1550
- European Pharmacopoeia 3.1.9

Typical Physical Properties (Sani-Tech® Ultra-HP Jacket)

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240	55
Tensile Strength psi	D412	1300
Ultimate Elongation, %	D412	500
Tear Resistance ppi	D792	190
Specific Gravity	D792	1.2
Tensile Modulus at 100% psi	D412	200

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.

Sterilization Methods

- Steam-In-Place (SIP)
- Radiation – up to 5.0 Mrad (50 Kilogray)
- Gas – ethylene oxide

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BIOPHARMACEUTICAL PRODUCTS

Come through clean.SM

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

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