MICRO

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

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PERFORMANCE PLASTICS

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	D471	
– strong or weak acids		excellent
– strong or weak alkalies		excellent
– solvents or fuels		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.

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.

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

Sterilization Methods

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

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

BIOPHARMACEUTICAL PRODUCTS
Come through clean.℠

MICRO

SAINT-GOBAIN
PERFORMANCE PLASTICS

ISO 9001
ISO 14001
BUREAU VERITAS
Certification

IMPORTANT: *It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics products 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 products in any particular application.*

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