

## Product Information

# Vena® Technosil USP Class VI

## APPLICATIONS

Specially recommended for the transport of liquid or semi-liquid fluids in the food, cosmetic, chemical and pharmaceutical industries. They can be used in places with high pressure due to his resistance. Due to its translucent appearance, the product inside the hose is visible during the process phase.



## LIMITATIONS

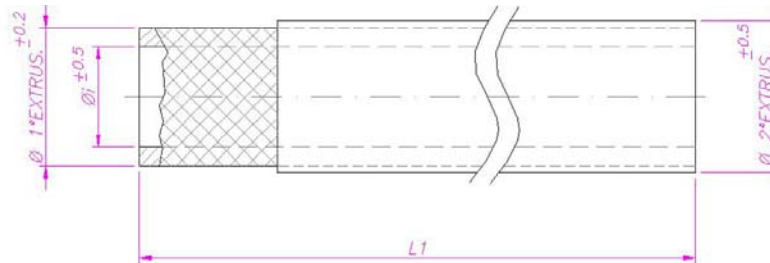
This type of hose is not recommended for operation with negative pressure (vacuum).  
Chemical compatibility of the fluid with the silicone.  
Not recommended for transport of abrasive particles.

## HOSE PROPERTIES

- Made from platinum-catalyzed silicone.
- Odorless, tasteless and completely non-toxic.
- High level of transparency and smooth inner appearance. Translucent and smooth outer appearance.
- This reference meets the 1935/2004/EC Regulation and European Council Resolution AP 2004 (5) – silicones.
- Silicone elastomer used for the production of this reference is in compliance with FDA 21 CFR 177.2600 (Food & Drug Administration), BfR Recommendation XV and Pharmacopeia USP Class VI.
- Manufactured with silicone elastomer in accordance with EU Directive 2002/95/ECC of Restriction of the use of certain hazardous substances (RoHS).
- Can be equipped with 316L stainless steel fittings on each end with a rugosity value of less than 0,8µm (or 0,5µm on request).
- Operational temperature range from -60(-76 F) to +180°C (356 F) (it may reach up to 200°C (392 f) during short periods of time).
- The standard manufacturing length is 10 meters long (32.81 ft.), although they can be manufactured in any length required.
- Working and bursting pressure determinate with pressure tests according ISO 1402/1994.
- Bending radius determinate according ISO 1746/1983.
- The silicone rubber which is used to manufacture this reference is in compliance with regulation 18-03 of the 3A Sanitary Standard Inc.
- It can be equipped with sanitary fittings in compliance with regulation 62-02 of the 3A Sanitary Standard Inc.

## TECHNICAL SPECIFICATIONS

Inner Diameter		Outer Diameter		Bending Radius	Working Pressure		Bursting Pressure	
				ISO 1746/1998	ISO 1402/2009		ISO 1402/2009	
(mm)	(Inch)	(mm)	(inch)	(mm)	(bar a 20°C)	(psi a 68°F)	(bar a 20°C)	(psi a 68°F)
6,35	1/4	13,20	0,52	40	9,3	135,4	28,0	406
7,93	5/16	15,00	0,59	45	7,7	111,2	23,0	334
9,52	3/8	16,60	0,65	55	7,0	101,5	21,0	305
12,70	1/2	20,30	0,80	70	5,7	82,2	17,0	247
15,87	5/8	24,50	0,96	85	4,3	62,9	13,0	189
19,05	3/4	27,90	1,10	95	3,7	53,2	11,0	160
22,22	7/8	31,30	1,23	110	3,3	48,3	10,0	145
25,40	1	34,50	1,36	135	3,0	43,5	9,0	131
31,75	1 1/4	40,80	1,61	160	2,3	33,8	7,0	102



### SILICONE PROPERTIES

The silicone rubber compound is VMQ type (Vinyl-Methyl Quality). The typical properties of the inner silicone are listed below:

Property	Method	Unit	Value
Hardness	ISO 868:2003	Shore-A	60±5
Specific gravity	ISO 2781:2008	g/cm <sup>3</sup>	1.20±0.02
Tensile strength	ISO 37:2001	MPa	>7
Elongation at break	ISO 37:2001	%	>350
Tear Strength	ISO 34-1:2010	kN/m	>18

The typical properties of the outer silicone are:

Property	Method	Unit	Value
Hardness	ISO 868:2003	Shore-A	70±5
Specific gravity	ISO 2781:2008	g/cm <sup>3</sup>	1.20±0.02
Tensile strength	ISO 37:2001	MPa	>7
Elongation at break	ISO 37:2001	%	>350
Tear Strength	ISO 34-1:2010	kN/m	>18

### CONSTRUCTION AND FABRIC PROPERTIES

This reference is manufactured by extrusion with polyester yarn braiding inside the tube. The typical properties of this fabric are:

Property	Method	Unit	Value
Tensile Strength		daN	8±0,50
Breaking elongation		%	12,30±0,60

### USE PRECAUTIONS

- The extreme working conditions or the use of materials with low compatibility with the silicone can attack the inner surface of the hose. It is advisable to inspect the inner appearance for cracks or swelling, and replacement of the hose, if necessary.
- Hose cover: Should be inspected over the entire length for signs of hardening, abrasion, cuts, kinking or crushing.