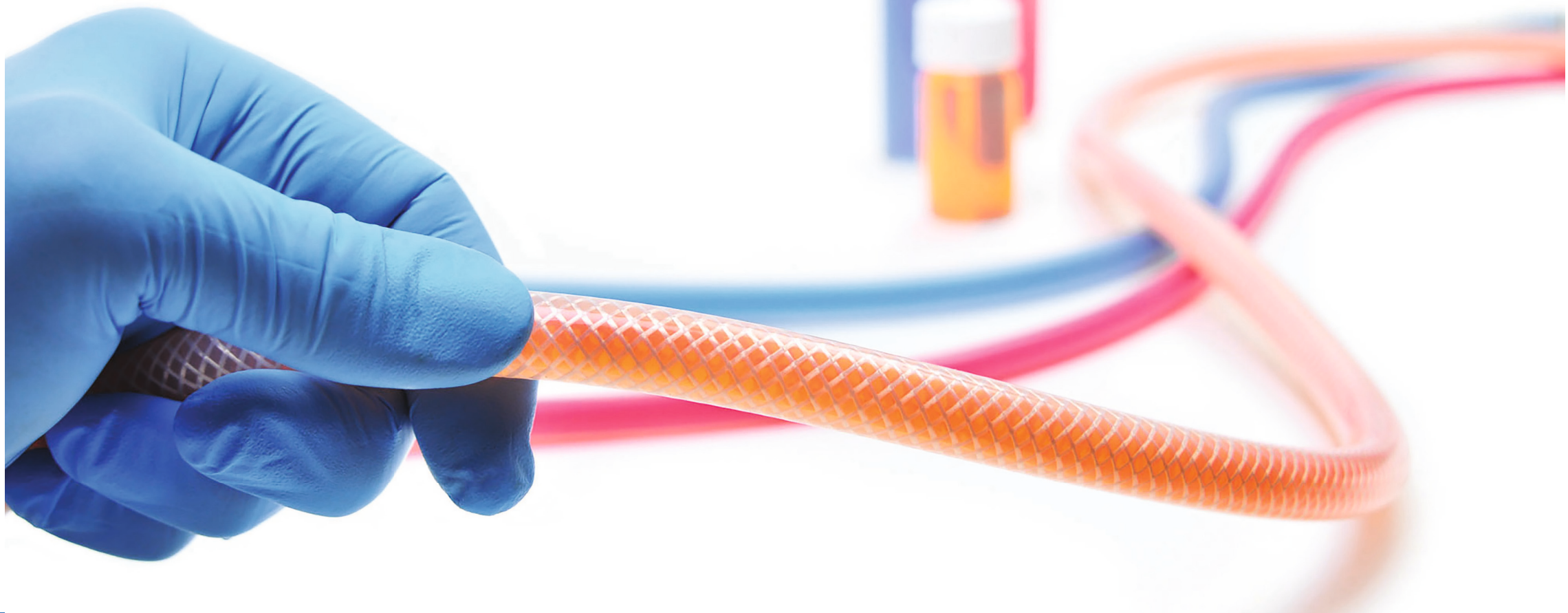


SaniSure® Tubing

The Best Home a Drug Can Get™



What We Do

Simplifying Single-Use Systems to build The Best Home a Drug Can Get™

SaniSure® is a global leader in the design and manufacturing of single-use systems and components for drug and vaccine manufacturing and other biotech applications. Our core manufacturing capabilities include injection molding, injection-stretch blow molding, cleanroom assembly, tubing extrusion, fabrication, and other proprietary technologies. We have a global footprint of 6 manufacturing sites worldwide to provide our customers with an unrivaled level of vertical integration and supply-chain security.

SaniSure® is simplifying single-use technologies for sterile manufacturing in the single-use bioprocessing industry. With the combination of Cellon, Silicone Altimex, TBL Performance Plastics, and Sani-Tech West in to SaniSure®, our resources, capabilities, and ability to create value for our customers is greater than ever and unmatched in the industry.



For more details, visit
sanisure.com/resources
or [linkedin/sanisure.com](https://linkedin.com/company/sanisure)



SaniSure® Products

Our Tubing Program

SaniSure® features decades of experience manufacturing a variety of thermoplastic and silicone tubing products for the bioprocessing industry.

Our growing extrusion capability includes over fifteen extruders world-wide and an extensive stocking program in both Europe and the USA.

Our quality support and documentation packages meet or exceed the most rigorous current standards in the industry.

Currently offered in three primary forms: our custom single-use assemblies and systems, bulk tubing, and custom cut lengths.



Particle Free Packing

**Double bags and heat seals are not enough!
SaniSure® adds a third layer of protection.**

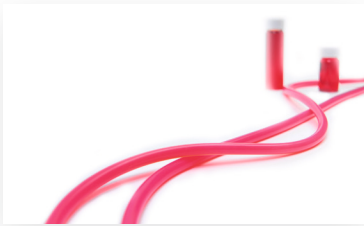
By adding a liner to each box, we ensure separation between the lining of each corrugate box and the cleanroom packed double-bagged package. The result is the highest level of particle control.



All tubing products available
in coils and spools.

SaniSure® Tubing Series

Overview Tubing Series



Pharma-Clear® LH

Extruded to precise dimensional tolerances, our Pharma-Clear® LH tubing was developed for critical biopharma applications where longer peristaltic-pump or pinch-valve life, accuracy, and purity are paramount.



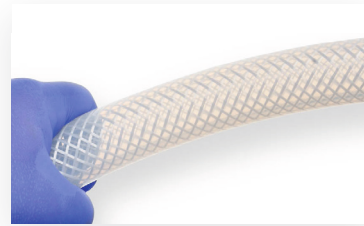
Pharma-Clear® 65

We developed our Pharma-Clear® 65 for bulk transfer and general peristaltic-pumping applications. With a slightly higher hardness rating, it has very good resilience and kink resistance and typically has a higher pressure rating than softer alternatives. It also, exhibits superior optical clarity.



Pharma-Line™ I

Manufactured from bio-compatible thermoplastic and extruded to precise dimensional tolerances, our Pharma-Line™ I tubing was developed to be compatible with all major peristaltic pumps. Pharma-Line™ I provides an excellent alternative to silicone tubing when resistance to chemicals (such as acetone or methylene chloride) is a concern.



Pharma-Clear® R

Polyester yarn-reinforced, inner braid was developed as a high pressure hose, uses the same compound as our PLTS-65 series tubing, and is tested to the same stringent biological and chemistry standards in order to meet or exceed all EU and USFDA regulations for pharmaceutical use. In addition to pharmaceutical processing, it is commonly used for fine chemicals and food and beverage applications.



Cellgyn®

Cellgyn® TPE tubing is designed specifically for the most demanding bio-pharmaceutical applications. It is ideal for use in single-use assemblies, process filling, and sampling devices and is compatible with all common tube sealers and aseptic tube welders such as Vante, Terumo, BioWelder, GE Sterile Tube Fuser and many more. Cellgyn® is exceptionally clear and has superior gas barrier properties and pressure performance vs. silicone tubing.

SaniSure® Tubing Series

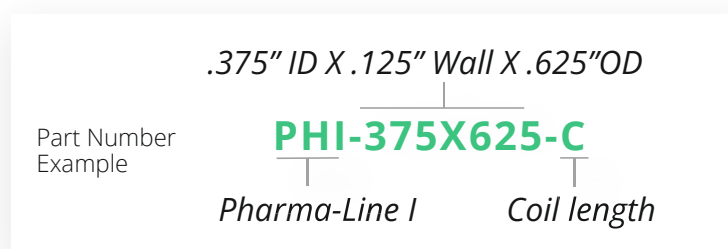
Tubing Series	Pharma-Clear® LH	Pharma-Clear® 65	Pharma-Clear® R	Cellgyn®	Pharma-Line™ I
Material	Plat Cured Silicone	Plat Cured Silicone	Plat Cured Silicone	TPE	TPV
Hardness ASTM Shore A (+/- 3)	50A	60A	60A	68A	68A
Appearance	Translucent	Clear	Clear / Braiding	Translucent	Opaque
Aseptic Sealing and Welding	No	No	No	Yes	No
High Pressure Applications	Poor	Fair	Excellent	Fair	Poor
Peristaltic Pump Life	Excellent	Fair	Pore	Fair	Excellent
Comprehensive Pump Performance Studies	✓	-	-	-	✓
Extractable Profile	✓	✓	✓	✓	✓
Toxicity Profile	✓	✓	✓	✓	✓
Autoclavability	✓	✓	✓	✓	✓
Steam in Place (SIP)	-	-	✓	-	-
Gamma Stability (max. 50 kGy)	✓	✓	✓	✓	✓
Max. Temperature	400°F 204.4°C	400°F 204.4°C	400°F 204.4°C	400°F 204.4°C	400°F 204.4°C
Min. Temperature (Bridle)	-100°F -73.3°C	-100°F -73.3°C	-100°F -73.3°C	-88°F -66.67°C	-75°F -59°C
Over-Molding Compatibility	✓	✓	✓	✓	✓
Sterilization Methods	Autoclave Gamma radiation Chemical sterilants EtO (Ethylene Oxide gas)	Autoclave Gamma radiation Chemical sterilants EtO (Ethylene Oxide gas)	Autoclave Gamma radiation Chemical sterilants	Autoclave Gamma radiation Chemical sterilants	Autoclave Gamma radiation Chemical sterilants

Building Your Part Number

Legend:

Pharma-Clear® 65 **PLTS-65**
 Pharma-Clear® LH **PLTS-LH**
 Cellgyn® **CGN**
 Pharma-Line™ I **PHI**
 Pharma-Clear® R **PLTS-R**

Lengths: See charts
 C=Coil length
 SP=Spool



SaniSure® Tubing Program

Pharma-Clear® LH Series

Platinum-Cured Silicone, Low Hysteresis Pump/Transfer Tubing

Key Features

- Platinum cured silicone
- Hardness: durometer 50 Shore A
- Excellent pump life
- Translucent (Good Clarity)
- Tasteless/ odorless
- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Sterilization Methods: autoclave, gamma radiation, EtO, and chemical sterilants
- Packaging: Double bagged 4 MIL Film with box liner

Applications

- Peristaltic Pumps
- Pinch Valves
- Transfer Lines
- High-Accuracy Filling
- Shear-sensitive fluid transfer
- Bioreactor process lines
- Production filtration and fermentation
- Diagnostics and laboratory testing

Compliance

- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI, Biological Reactivity Tests, In Vivo (2020)
- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <87> Class VI, Biological Reactivity Tests, In Vitro (2020)
- ISO 10993 (various parts)
- Request our comprehensive extractables and biocompatibility study for this product: sanisure.com/resources

Physical	Typical Values
Specific Gravity	1.12
Shore A Hardness	50
Tensile (PSI)	1100
Tensile (Mpa)	7.6
Elongation (%)	450
Tear, Die B, ppi	100
Tear, Die B, KN/mm	17.5
Compression Set %	30



Excellent Pump Life



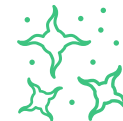
Kink Resistant



Bio-Compatible



Extensive Extractables Testing



Gamma-Irradiation & Autoclave Compatible



Good Chemical Resistance



Safe Disposal Through Incineration

Pharma-Clear® LH – Sizing Chart Standard Offerings

Part Number	Pump Size	Nominal Bore		Wall Thickness		OD		Coll (feet/meter)	Spool (feet/meter)
		(inch)	(mm)	(inch)	(mm)	(inch)	(mm)		
PLTS-LH-031X156-**	13	0.031	0.8	0.063	1.6	0.156	4.0	50/15	Consult Factory
PLTS-LH-063X125-**		0.063	1.6	0.031	0.8	0.125	3.2	50/15	Consult Factory
PLTS-LH-063X187-**	16	0.063	1.6	0.062	1.6	0.187	4.8	50/15	Consult Factory
PLTS-LH-063X250-**	119	0.063	1.6	0.094	2.4	0.250	6.4	50/15	Consult Factory
PLTS-LH-093X218-**		0.094	2.4	0.063	1.6	0.219	5.6	50/15	Consult Factory
PLTS-LH-125X250-**	16	0.125	3.2	0.063	1.6	0.250	6.4	50/15	500/152
PLTS-LH-125X313-**	120	0.125	3.2	0.094	2.4	0.313	8.0	50/15	Consult Factory
PLTS-LH-125X375-**		0.125	3.2	0.125	3.2	0.375	9.6	50/15	Consult Factory
PLTS-LH-187X313-**	25	0.187	4.8	0.063	1.6	0.313	8.0	50/15	Consult Factory
PLTS-LH-187X375-**	15	0.187	4.8	0.094	2.4	0.375	9.6	50/15	Consult Factory
PLTS-LH-187X437-**		0.187	4.8	0.125	3.2	0.438	11.2	50/15	Consult Factory
PLTS-LH-250X375-**	17	0.250	6.4	0.063	1.6	0.375	9.6	50/15	Consult Factory
PLTS-LH-250X437-**	24	0.250	6.4	0.094	2.4	0.438	11.2	50/15	Consult Factory
PLTS-LH-250X500-**	26	0.250	6.4	0.125	3.2	0.500	12.7	50/15	Consult Factory
PLTS-LH-313X375-**		0.313	8.0	0.031	0.8	0.375	9.6	50/15	Consult Factory
PLTS-LH-313X437-**	18	0.313	8.0	0.063	1.6	0.438	11.2	50/15	300/92
PLTS-LH-313X500-**	35	0.313	8.0	0.094	2.4	0.500	12.7	50/15	Consult Factory
PLTS-LH-313X563-**		0.313	8.0	0.125	3.2	0.563	14.4	50/15	Consult Factory
PLTS-LH-375X500-**		0.375	9.6	0.063	1.6	0.500	12.7	50/15	Consult Factory
PLTS-LH-375X562-**	36	0.375	9.6	0.094	2.4	0.563	14.4	50/15	Consult Factory
PLTS-LH-375X625-**	73	0.375	9.6	0.125	3.2	0.625	16.0	50/15	Consult Factory
PLTS-LH-500X625-**		0.500	12.6	0.063	1.6	0.625	16.0	50/15	Consult Factory
PLTS-LH-500X750-**	82	0.500	12.7	0.125	3.2	0.750	19.0	50/15	150/46
PLTS-LH-625X875-**	184	0.625	15.9	0.125	3.2	0.875	22.3	50/15	Consult Factory
PLTS-LH-625X1000-**	88	0.625	15.9	0.188	4.8	1.000	25.5	50/15	Consult Factory
PLTS-LH-750X1000-**		0.750	19.0	0.125	3.2	1.000	25.5	50/15	Consult Factory
PLTS-LH-750X1125-**	90	0.750	19.0	0.188	4.8	1.125	28.6	50/15	Consult Factory
PLTS-LH-1000X1375-**	92	1.000	25.4	0.189	4.8	1.375	35.0	50/15	Consult Factory
PLTS-LH-3MMx7MM-**			3		2		7	50/15	Consult Factory
PLTS-LH-6MMx12MM-**			6		3		12	50/15	Consult Factory
PLTS-LH-8MMx16MM-**			8		4		16	50/15	Consult Factory
PLTS-LH-10MMx17MM-**			10		3.5		17	50/15	Consult Factory

Note: Please contact our quality department for the most up-to-date regulatory information. Specifications in this document are subject to change without notice.

SaniSure® Tubing Program

Pharma-Clear® 65 Series

Platinum-Cured Silicone Clear Transfer Tubing

Key Features

- Platinum cured Silicone
- Higher pressure ratings
- Excellent clarity
- Hardness: durometer 61 Shore A
- Tasteless, odorless, noncytotoxic and nonhemolytic
- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Low-binding surface minimizes absorption of proteins and food products
- Sterilization Methods: autoclave, gamma radiation, EtO, and chemical sterilants
- Packaging: Double bagged 4 MIL Film with box liner

Applications

- Transfer Lines
- Filling
- Cell media processing
- Bioreactor process lines
- Production filtration and fermentation
- Diagnostics and laboratory testing



Compliance

- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI, Biological Reactivity Tests, In Vivo (2020)
- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <87> Class VI, Biological Reactivity Tests, In Vitro (2020)
- ISO 10993 (various parts)
- Request our comprehensive extractables and biocompatibility study for this product: sanisure.com/resources

Physical	Typical Values
Specific Gravity	1.18
Shore A Hardness	61
Tensile (PSI)	1523
Tensile (Mpa)	10.5
Elongation (%)	530
Tear, Die B, ppi	183
Tear, Die B, KN/mm	32



Improved Pressure Rating



Excellent Clarity



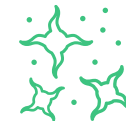
Kink Resistant



Bio-Compatible



Extensive Extractables Testing



Gamma-Irradiation & Autoclave Compatible



Good Chemical Resistance



Safe Disposal Through Incineration

Pharma-Clear® 65 – Sizing Chart Standard Offerings

Part Number	Pump Size	Nominal Bore		Wall Thickness		OD		Coil (feet/meter)	Spool (feet/meter)
		(inch)	(mm)	(inch)	(mm)	(inch)	(mm)		
PLTS-65-031X156-**		0.031	0.8	0.063	1.6	0.156	4.0	50/15	Consult Factory
PLTS-65-063X125-**		0.063	1.6	0.031	0.8	0.125	3.2	50/15	Consult Factory
PLTS-65-063X187-**		0.063	1.6	0.062	1.6	0.187	4.8	50/15	Consult Factory
PLTS-65-125X250-**		0.125	3.2	0.063	1.6	0.250	6.4	50/15	500/152
PLTS-65-125X313-**		0.125	3.2	0.094	2.4	0.313	8.0	50/15	Consult Factory
PLTS-65-187X313-**		0.187	4.8	0.063	1.6	0.313	8.0	50/15	Consult Factory
PLTS-65-187X375-**		0.187	4.8	0.094	2.4	0.375	9.6	50/15	Consult Factory
PLTS-65-187X437-**		0.187	4.8	0.125	3.2	0.438	11.2	50/15	Consult Factory
PLTS-65-250X375-**		0.250	6.4	0.063	1.6	0.375	9.6	50/15	Consult Factory
PLTS-65-250X437-**		0.250	6.4	0.094	2.4	0.438	11.2	50/15	300/92
PLTS-65-250X500-**		0.250	6.4	0.125	3.2	0.500	12.7	50/15	Consult Factory
PLTS-65-313X437-**		0.313	8.0	0.063	1.6	0.438	11.2	50/15	Consult Factory
PLTS-65-313X500-**		0.313	8.0	0.094	2.4	0.500	12.7	50/15	Consult Factory
PLTS-65-375X437-**		0.375	9.6	0.031	0.8	0.438	11.2	50/15	Consult Factory
PLTS-65-375X562-**		0.375	9.6	0.094	2.4	0.563	14.4	50/15	Consult Factory
PLTS-65-375X625-**		0.375	9.6	0.125	3.2	0.625	16.0	50/15	150/46
PLTS-65-500X750-**		0.500	12.7	0.125	3.2	0.750	19.0	50/15	150/46
PLTS-65-625X1000-**		0.625	15.9	0.188	4.8	26.9	25.5	50/15	Consult Factory
PLTS-65-750X1125-**		0.750	19.0	0.188	4.8	29.1	28.6	50/15	Consult Factory
PLTS-65-1000X1375-**		26.9	25.4	0.189	4.8	6.10	35.0	50/15	Consult Factory
PLTS-65-3MMx7MM-**			3.1		2.1		7.1	82/25	Consult Factory
PLTS-65-6MMx12MM-**			6.1		3.1		12.1	82/25	Consult Factory
PLTS-65-8MMx16MM-**			8.1		4.1		16.1	82/25	Consult Factory
PLTS-65-10MMx17MM-**			10.1		3.5		17.1	82/25	Consult Factory

Note: Please contact our quality department for the most up-to-date regulatory information. Specifications in this document are subject to change without notice.

SaniSure® Tubing Program

Pharma-Clear® R Series

Platinum-Cured Reinforced Silicone Hose

Key Features

- Platinum cured Silicone with nylon inner reinforcement
- Hardness: durometer 61 Shore A
- Excellent Clarity Nylon Reinforced for high pressure applications
- Tasteless, odorless
- Contains no phthalate plasticizers or peroxides that can leach out into process fluid
- Low-binding surface minimizes absorption of proteins and food products
- Sterilization Methods: autoclave, gamma radiation, and chemical sterilants
- Packaging: Double bagged 4 MIL Film with box liner

Applications

- High Pressure transfer line
- Steam in Place (SIP)
- Load Cells Hoses
- Process Hoses

Compliance

Inner tube has passed:

- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI, Biological Reactivity Tests, In Vivo (2020)
- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <87> Class VI, Biological Reactivity Tests, In Vitro (2020)
- ISO 10993 (various parts)
- Request our comprehensive extractables and biocompatibility study for this product: [sanisure.com/resources](https://www.sanisure.com/resources)



High Pressure
Rating



Excellent
Clarity



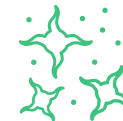
Bio-Compatible



Kink Resistant



Extensive
Extractables Testing



Gamma-Irradiation &
Autoclave Compatible



Good Chemical
Resistance



Safe Disposal
Through Incineration

Pharma-Clear® R – Sizing Chart Standard Offerings

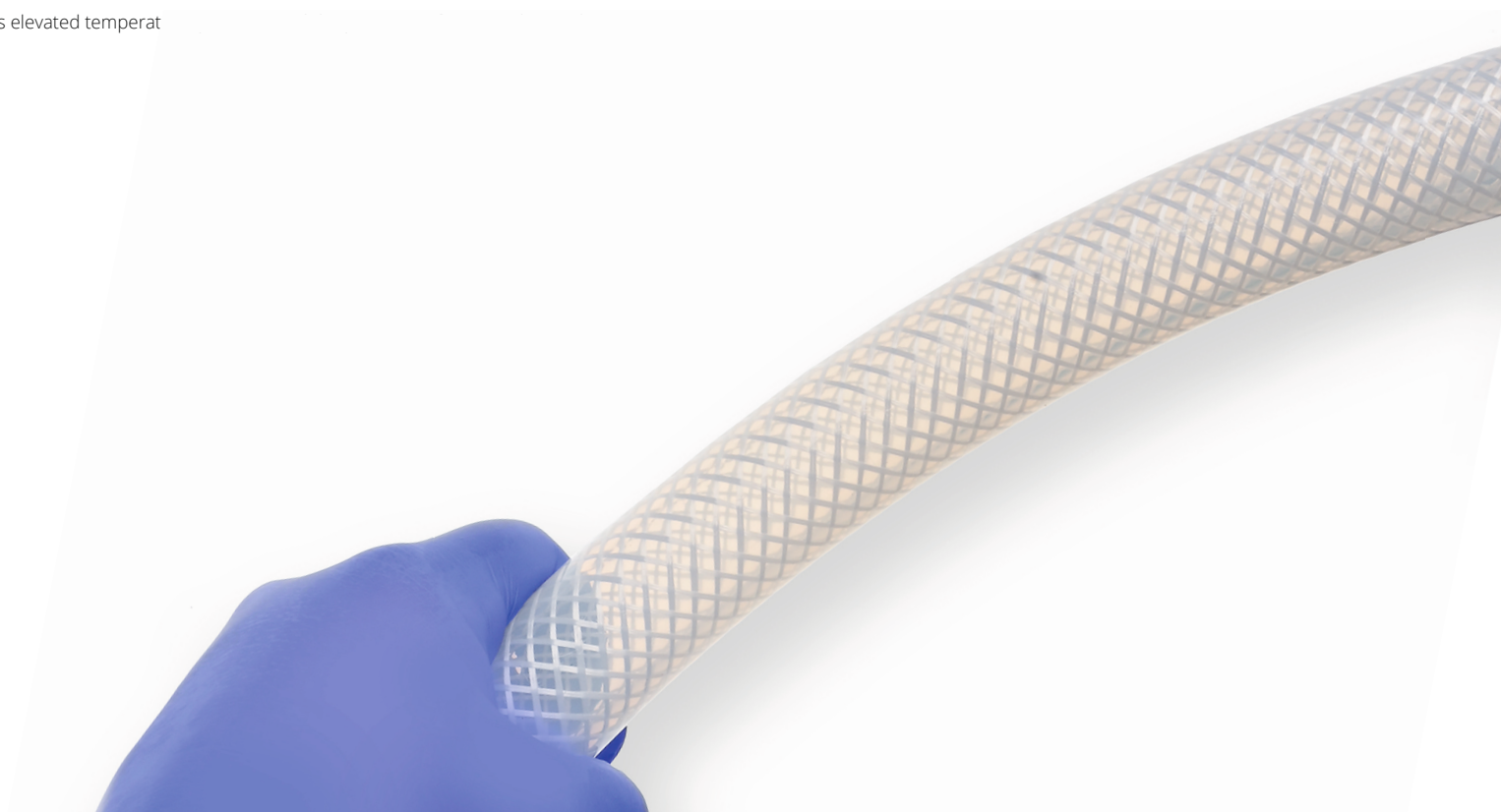
Part Number	Nominal Bore		Wall Thickness		OD		Standard Lengths (feet/meter)	Working Pressure	
	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)		(at 70° F psi)	(at 21.1°C bar)
PLTS-R-250-50-A	.250"	6.4	.125"	3.2	.500"	12.7	50/15	19.5	1.9
PLTS-R-375-50-A	.375"	9.6	.125"	3.2	.625"	15.9	50/15	19.5	1.9
PLTS-R-500-50-A	.500"	12.7	.188"	4.8	.875"	22.2	50/15	14.4	1.7
PLTS-R-625-50-A	.625"	15.9	.183"	4.6	.990"	25.1	50/15	9.4	6.9
PLTS-R-750-50-A	.750"	19.1	.188"	4.8	1.125"	28.6	50/15	30.3	1.6
PLTS-R-1000-50-A	1.00"	25.4	.202"	5.1	1.405"	35.7	50/15	29.2	1.4

Working Pressure: based on 70°F (21.1°C)

Working Pressure: based on a 3:1 burst factor

Note: Please contact our quality department for the most up-to-date regulatory information. Specifications in this document are subject to change without notice.

Pressure ratings may be affected greatly by many factors such as elevated temperat



SaniSure® Tubing Program

Pharma-Line™ I Series

Thermoplastic (TPV) Peristaltic Pump Tubing

Key Features

- Thermoplastic vulcanite (TPV)
- Opaque
- Excellent Pump Performance
- Good Chemical Resistance
- Tasteless, odorless
- Contains no phthalate plasticizers or peroxides that can leach out into process fluid
- Sterilization Methods: autoclave, gamma radiation, and chemical sterilants
- Hardness: durometer 68 Shore A
- Packaging: Double bagged 4 MIL Film with box liner

Applications

- Peristaltic Pumps
- Pinch Valves
- Filling
- Bioreactor process lines
- Fluid transfer
- Diagnostics and laboratory testing

Compliance

- US Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI Biological Reactivity Tests, In Vivo (2020)
- ISO 10993 (various parts)
- USP 661.2
- Request our comprehensive extractables and biocompatibility study for this product: sanisure.com/resources

Physical	Typical Values
Specific Gravity	0.952
Hardness (Shore A, at 10 Sec)	70
Tensile Stress ²	—
Across Flow: 100% Strain	365 psi
Flow: 100% Strain, 70°F	540 psi
Tensile Strength 2, 3	—
Across Flow: 100% Strain, 7	588 psi
Flow: 100% Strain, 73°F	697 psi
Tensile Elongation 2, 3	290%
Across Flow: Break 73°F	290%
Flow: Break 73°F	240%
Compression Set	—
72°F, 22.0 Hours	17%
158°F, 22.0 Hours	41%
212°F, 22.0 Hours	51%



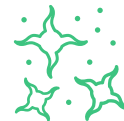
Excellent Pump Life



Good Chemical Resistance



Kink Resistant



Gamma-Irradiation & Autoclave Compatible



Safe Disposal Through Incineration



Bio-Compatible

Pharma-Line™ I – Sizing Chart Standard Offerings

Part Number	Pump Size	Nominal Bore		Wall Thickness		OD		Coil (feet/meter)	Spool (feet/meter)
		(inch)	(mm)	(inch)	(mm)	(inch)	(mm)		
PHI-031X156-**	13.1	0.031	0.8	0.063	1.6	0.156	4.0	50/15	Consult Factory
PHI-063X187-**	14.1	0.063	1.6	0.062	1.6	0.187	4.8	50/15	Consult Factory
PHI-063X250-**	29.4	0.063		0.094	2.4	0.250		50/15	Consult Factory
PHI-093X218-**		0.094	2.4	0.063	1.6	0.219	5.6	50/15	Consult Factory
PHI-125X250-**	16.1	0.125	3.2	0.063	1.6	0.250	6.4	50/15	500/152
PHI-125X313-**	29.4	0.125	3.2	0.094	2.4	0.313	8.0	50/15	Consult Factory
PHI-187X375-**	15.1	0.187	4.8	0.094	2.4	0.375	9.6	50/15	Consult Factory
PHI-187X437-**		0.187	4.8	0.125	3.2	0.438	11.2	50/15	Consult Factory
PHI-250X375-**	17.1	0.250	6.4	0.063	1.6	0.375	9.6	50/15	Consult Factory
PHI-250X437-**	24.1	0.250	6.4	0.094	2.4	0.438	11.2	50/15	300/92
PHI-250X500-**	26.1	0.250	6.4	0.125	3.2	0.500	12.7	50/15	Consult Factory
PHI-313X437-**	18.1	0.313	8.0	0.063	1.6	0.438	11.2	50/15	Consult Factory
PHI-315X630-**		0.315	8.0	0.157	4.0	0.630	16.0	50/15	Consult Factory
PHI-313X500-**	4.2	0.313	8.0	0.094	2.4	0.500	12.7	50/15	Consult Factory
PHI-375X562-**	5.2	0.375	9.6	0.094	2.4	0.563	14.4	50/15	Consult Factory
PHI-375X625-**	13.3	0.375	9.6	0.125	3.2	0.625	16.0	50/15	150/46
PHI-472X787-**		0.472	12.0	0.157	4.0	0.787	20.0	50/15	Consult Factory
PHI-500X750-**	22.3	0.500	12.7	0.125	3.2	0.750	19.0	50/15	150/46
PHI-500X875-**		0.500	12.7	0.188	4.8	0.875	22.3	50/15	Consult Factory
PHI-625X875-**	2.7	0.625	15.9	0.125	3.2	0.875	22.3	50/15	Consult Factory
PHI-625X1000-**	28.3	0.625	15.9	0.188	4.8	26.9	25.5	50/15	Consult Factory
PHI-630X945-**		0.630	16.0	0.157	4.0	0.945	24.0	50/15	Consult Factory
PHI-750X1125-**	30.3	0.750	19.0	0.188	4.8	29.1	28.6	50/15	Consult Factory
PHI-1000X1375-**	1.4	26.9	25.4	0.188	4.8	6.10	35.0	50/15	Consult Factory
PHI-3MMx7MM-**			3.1		2.1		7.1	50/15	Consult Factory
PHI-6MMx12MM-**			6.1		3.1		12.1	50/15	Consult Factory
PHI-8MMx16MM-**			8.1		4.1		16.1	50/15	Consult Factory
PHI-10MMx17MM-**			10.1		3.5		17.1	50/15	Consult Factory

Cross sectional tolerance: RMA E1

Note: Please contact our quality department for the most up-to-date regulatory information. Specifications in this document are subject to change without notice.

Spooled tubing may exhibit a slight ovality toward the core of the spool.

Due to the critical nature of concentricity in peristaltic pumping applications, coils or cut lengths are generally recommended where peristaltic pumps are used.



SaniSure® Tubing Program

Cellgyn® Series

Thermoplastic (SEBS) Weldable/Sealable Transfer Tubing



Key Features

- Thermoplastic elastomer (SEBS)
- Translucent
- Compatible with common welding/sealing machines
- Weld compatible with common TPE tubing brands
- Tasteless, odorless
- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Sterilization Methods: autoclave, gamma radiation, and chemical sterilants
- Hardness: durometer 68 Shore A
- Packaging: Double bagged 4 MIL Film with box liner

Applications

- Single-Use Assemblies
- Sealing
- Welding
- Buffer and media preparation
- Cell media processing
- Transfer sets
- Bag manifolds

Compliance

- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI, Biological Reactivity Tests, In Vivo (2020)
- U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <87> Class VI, Biological Reactivity Tests, In Vitro (2020)
- ISO 10993 (various parts)
- Comprehensive extractables testing and characterization after gamma irradiation
- Request our comprehensive extractables and biocompatibility study for this product: sanisure.com/resources

Physical	Typical Values
Specific Gravity	0.89
Hardness (Shore A, at 10 Sec)	68
Tensile Stress	~
100% Strain, 70°F	390 psi
Flow: 100% Strain, 70°F	660 psi
Tensile Strength ^{2,3} (Break at 73°F)	870 psi
Tensile Elongation (Break at 73°F)	510 psi
Compression Set	~
72°F, 22.0 Hours	17%
158°F, 22.0 Hours	58%
212°F, 22.0 Hours	69%



Heat Weldable/
Sealable



Excellent Gas
Barrier Properties



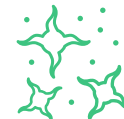
Bio-Compatible



Kink Resistant



Extensive
Extractables Testing



Gamma-Irradiation &
Autoclave Compatible



Safe Disposal
Through Incineration



Translucent

Cellgyn® Series – Sizing Chart

Standard Offerings

Part Number	Pump Size	Nominal Bore		Wall Thickness		OD		Coil (feet/meter)	Spool (feet/meter)
		(inch)	(mm)	(inch)	(mm)	(inch)	(mm)		
CGN-125X250-**		0.125	3.2	0.063	1.6	0.250	6.4	50/15	500/152
CGN-187X312-**		0.187	4.8	0.063	1.6	0.313	8.0	50/15	Consult Factory
CGN-187X375-**		0.187	4.8	0.094	2.4	0.375	9.6	50/15	Consult Factory
CGN-250X375-**		0.250	6.4	0.063	1.6	0.375	9.6	50/15	Consult Factory
CGN-250X437-**		0.250	6.4	0.094	2.4	0.438	11.2	50/15	300/92
CGN-250X500-**		0.250	6.4	0.125	3.2	0.500	12.7	50/15	Consult Factory
CGN-312X437-**		0.313	8.0	0.063	1.6	0.438	11.2	50/15	Consult Factory
CGN-312X500-**		0.313	8.0	0.094	2.4	0.500	12.7	50/15	Consult Factory
CGN-375X500-**		0.375	9.6	0.063	1.6	0.500	12.7	50/15	Consult Factory
CGN-375X562-**		0.375	9.6	0.094	2.4	0.563	14.4	50/15	150/46
CGN-375X625-**		0.375	9.6	0.125	3.2	0.625	16.0	50/15	Consult Factory
CGN-500X750-**		0.500	12.7	0.125	3.2	0.750	19.0	50/15	150/46
CGN-625X875-**		0.625	15.9	0.125	3.2	0.875	22.3	50/15	Consult Factory
CGN-750X1000-**		0.750	19.0	0.125	3.2	26.9	25.4	50/15	Consult Factory
CGN-750X1125-**		0.750	19.0	0.188	4.8	29.1	28.6	50/15	Consult Factory
CGN-1000X1375-**		26.9	25.4	0.189	4.8	6.10	35.0	50/15	Consult Factory
CGN-3MMx7MM-**			3.1		2.1		7.1	50/15	Consult Factory
CGN-6MMx12MM-**			6.1		3.1		12.1	50/15	Consult Factory
CGN-8MMx16MM-**			8.1		4.1		16.1	50/15	Consult Factory
CGN-10MMx17MM-**			10.1		3.5		17.1	50/15	Consult Factory

Note:

Please contact our quality department for the most up-to-date regulatory information. Specifications in this document are subject to change without notice.

Spooled tubing may exhibit a slight ovality toward the core of the spool. Due to the critical nature of concentricity in peristaltic pumping applications, coils or cut lengths are generally recommended where peristaltic pumps are used.

Sealable



Weldable



SaniSure® Tubing Program

Related Products



Overmolded Manifolds

SaniSure® employs two methods for over-molding manifold junctions such as tees, cross tees, reductions and other types of integrated fittings within a fluid manifold set. We offer both Silicone and Thermoplastic capabilities. All applications are considered custom designs and are tailored to the specific customer need.



Sanitary Connections

With similar processes to that of our over-molded manifold program, SaniSure® has developed an extensive portfolio of sanitary, over-molded hose connections. Eliminating hose barb connections have many benefits, these include low shear surfaces, lower potential for bio egress, and compatibility with apposing single use non-metallic connections.



Custom Cleanroom Solutions

Our staff is well equipped to provide assembly and packaging services. The SaniSure® design team commonly works with our customers to develop tailored solutions, from the beginning stages through full-scale manufacturing processes in one of our five ISO Class 7 Certified Cleanrooms across North America and EU.





Sanitary Fittings

SaniSure® manufactures and stocks a wide variety of high-purity, Tri-Clamp® compatible fittings for single-use fluid conveyance applications. These include concentric reducers, tees, elbows, and barbed adapters. Our barbed sanitary adapter fittings are compatible with most standard sanitary clamps, including our Bio-Ease+™ sanitary clamp. Some standard materials include animal-derived ingredient free (ADIF) Polypropylene and PVDF, both of which have excellent chemical resistance.



Bio-Ease HD Tubing Pinch Clamp

The Bio-Ease HD Clamp has been designed for critical fluid applications within Bio-Ease® clamps self-adjust for balanced contact the Biotechnology and Pharmaceutical pressure by means of our exclusive limited-slip design industries. With the quick swingaway lock nut, it provides for user-friendly operation.



Bio-Ease+™ Sanitary Clamps

Introducing the patented Bio-Ease™ sanitary clamp, which was designed to address the unique needs of single-use disposable/ bio-pharm markets. Bio-Ease+™ hinged clamps are manufactured using a glass-reinforced, USP Class VI Nylon and are designed to be used as a component for single-use transfer lines and a wide range of bio-process systems. Developed for use in both non-metallic/non-metallic and non-metallic/metallic connections, the clamps won't damage or distort non-metallic ferrules as standard stainless steel clamps might. The clamps are also much lighter than their stainless steel counterparts and do not as thermally conductive.

SaniSure® Certifications

If SaniSure containers and mixers are the heart of your biological process, then the tubing are the arteries! Neither functions properly without the good health of the other.

It is for this reason that we identified the need to create a common, global-quality platform which brings our complete portfolio of products to a single standard.

We asked the internationally recognized Bio Process Institute to develop a “Best in Class” quality strategy that takes into account the current regulatory landscape, such as BPOG and USP 665, but which also goes beyond to address future trends.

As a result of the collaboration, we have one of the most comprehensive taxological and chemistry profiles available.



For more details, visit
sanisure.com/resources
or [linkedin/sanisure.com](https://www.linkedin.com/company/sanisure)

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of SaniSure® products for all intended uses. For a period of 90 days from the date of delivery, SaniSure® warrants this product to be free from defects in materials and workman-ship. Our only obligation will be to replace any portion proving defective, or at our discretion, refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse or inability to use this product. **THIS LIMITED WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.** No deviation is authorized. SaniSure® assumes no obligations or liability for any advice furnished by it or for results obtained with respect to those products. All such advice is given and accepted at the user's risk. All specifications contained within this document are subject to change without notice. Please contact our quality department for the most up to date validation and information related to product-qualification.



SaniSure®

Our Global Footprint



Contact

Americas

1020 Flynn Road
Camarillo, CA 93012
United States

+1-805-920-7264

SalesSupport-US@SaniSure.com

Europe & Asia

ZAE Robert Steichen 16, rue Héierchen
L4940 Bascharage
Grand Duché du Luxembourg

+352-26-33731

SalesSupport-EU@SaniSure.com



Please visit our website
to learn more
sanisure.com



3265 Sunset Lane Hatboro, PA 19040 | 215-675-5700 | sentinelprocess.com

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of SaniSure[®] products for all intended uses.
For a period of 90 days from the date of delivery, SaniSure[®] warrants this product to be free from defects in materials and workman- ship.
Our only obligation will be to replace any portion proving defective, or at our discretion, refund the purchase price thereof.
User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse or inability to use this product.
THIS LIMITED WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.
No deviation is authorized. SaniSure[®] assumes no obligations or liability for any advice furnished by it or for results obtained with respect to those products.
All such advice is given and accepted at the user's risk.
All specifications contained within this document are subject to change without notice.
Please contact our quality department for the most up to date validation and information related to product-qualification.