

Product Comparison Chart – BioPharmaceutical, BioTechnology Tubing

Formulation	Platinum-Cured Silicone Tubing	Tygon® Silicone Tubing	PharMed® Tubing	C-Flex® Tubing
Classification	Meets FDA and USP Class VI standards.	Meets FDA and USP Class VI standards.	Meets FDA and USP Class VI standards.	Meets FDA and USP Class VI standards.
Advantages	Excellent biocompatibility. No leachable additives or plasticizers. Latex free, fungus-resistant. Good over a wide temperature range. Minimal tendency to take a set.	Smooth inner surface. Excellent biocompatibility. No leachable additives or plasticizers. Nontoxic and fungus resistant. Minimizes particle entrapment. Available platinum cured.	Good for tissue and cell work. Nontoxic and non-hemolytic. Opaque to UV and visible light to protect light-sensitive fluids. Heat sealable, bondable, and formable. Low gas permeability.	Excellent biocompatibility. Physical properties similar to silicone with chemical compatibility of PVC. Inexpensive. Smooth inner surface. Nontoxic, no latex or plasticizers. Lower gas permeability than silicone.
Limitations	Do not use with concentrated acids and bases, organic solvents, or oils.	Do not use with concentrated solvents, oils or acids. Relatively high gas permeability.	Potential leaching of USP mineral oil or blend materials.	Not recommended for use with oils. Somewhat limited temperature ranges.
Physical Characteristics	Thermoset rubber. Good compression set. Soft, flexible materials. Translucent or clear.	Thermoset rubber. Good compression set. Soft, flexible materials. Translucent or clear.	Thermoplastic elastomer /polypropylene-based material with USP mineral oil. Good tensile strength. Firm (stiff material), opaque, beige.	Thermoplastic elastomer. Styrene-ethylene-butylene-styrene block copolymer. Excellent tensile and tear strength. Soft material, opaque or clear.
Suitable for:				
Acids	Poor	Poor	Good	Good
Alkalis	Poor	Poor	Good	Good
Org. Solvents	Not recommended	Not recommended	Not recommended	Not recommended
Pressure	Fair	Fair	Excellent	Good
Vacuum	Good	Good	Excellent	Excellent
Viscous fluids	Fair	Fair	Excellent	Good
Sterile Fluids	Excellent	Excellent	Excellent	Excellent
Temperature Range	-58 to 446°F -50 to 232°C	-75 to 450°F -60 to 232°C	-60 to 270°F -59 to 135°C	-100 to 270°F -73 to 135°C
Typical Pricing (50 Ft/Coil) 1/4" x 3/8"	\$ 93.00 / coil \$1.86 / ft	\$ 73.50 / coil \$ 1.47 / ft	\$ 112.00 / coil \$ 2.24 / ft	\$ 46.00 / coil \$.92 / ft

For samples, validation data, or other information, please contact:
Mona Jeffries or Jerry Stadt at CPT

Tygon – Reg. TM Saint Gobain Performance Plastics Corp.
PharMed – Reg. TM Saint Gobain Performance Plastics Corp.
C-Flex – Reg. TM Consolidated Polymer Technologies, Inc.

Note: All recommendations and suggestions contained in our printed matter regarding end uses and methods of use are based upon laboratory studies, test results and experience available to us. However, as we cannot control the conditions and circumstances under which our products may be used, users of C-Flex® products have sole responsibility for their use. Consolidated Polymer Technologies, Inc. makes no other warranties, express or implied, and disclaims any warranty of merchantability and fitness for use.