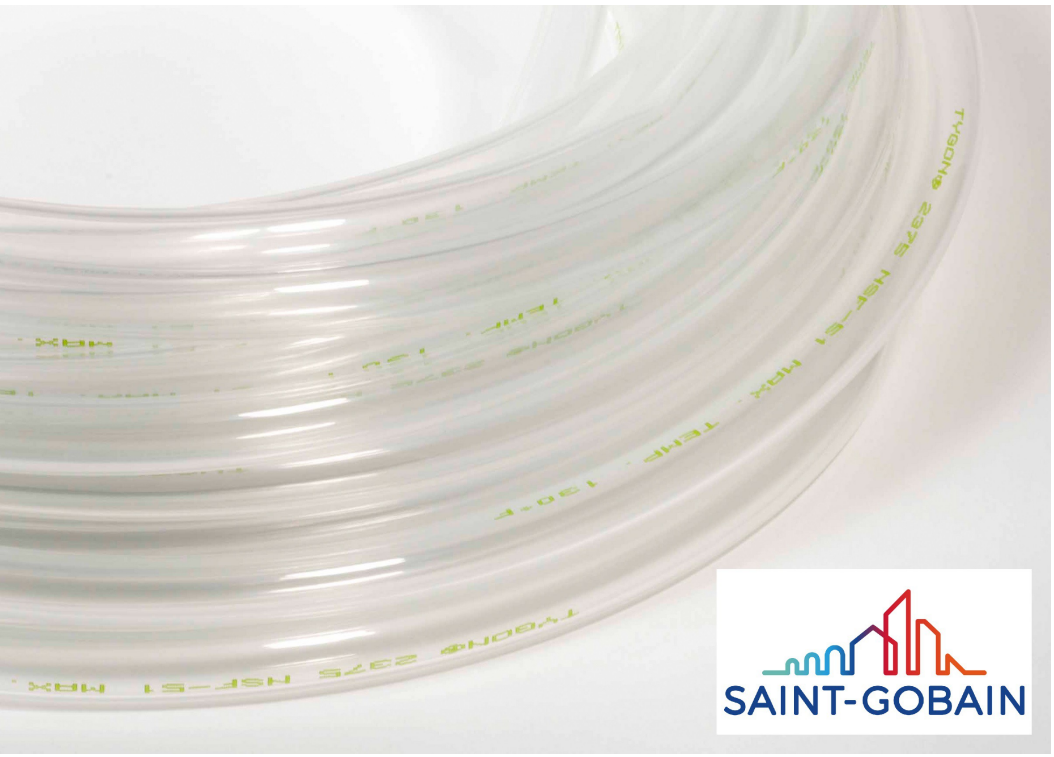
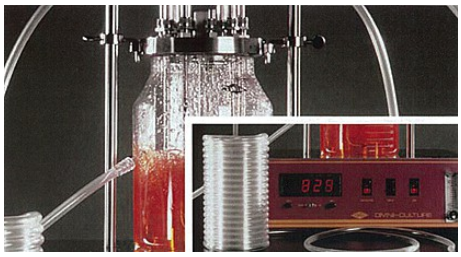
OPTUBUS
Fluid Transfer Components

Tygon® 2475

Plasticizer **F**ree **T**hermoplastic



Inhibits **P**articulate **E**ntrapment



Plasticizer free for lower extractables

Tygon® 2475 plasticizer free tubing is formulated without the addition of softening agents or oils, reducing potential contamination of sensitive fluids in biopharmaceutical applications. The absence of plasticizers allows the tubing to stand up to aggressive acids, bases and solvents that would react with or extract plasticizer from a standard PVC tube. The crystal clear construction of Tygon 2475 tubing allows visual inspection of fluid path to ensure consistency of flow. Tygon 2475 has lower gas permeation than standard silicone tubing, protecting sensitive fluids from moisture loss and oxidation.

Low wetting and ultra smooth

The low surface energy of Tygon® 2475 reduces wetting of aqueous substances, allowing higher recovery of fluids. Its superior surface smoothness reduces the potential for microbial buildup, especially critical in bioprocess applications. In addition, Tygon 2475 has very low absorption of aqueous substances minimizing the risk of fluid alteration in single use or repeat use applications.

Fully Characterized and Biocompatible

Tygon® 2475 comes complete with biocompatible, physiochemical and extractable testing.

Features and Benefits

- Exceptionally low gas permeation compared to silicone
- Smooth inner surface inhibits particulate entrapment
- Highly resistant to aggressive cleaners and sanitizers
- Free from added plasticizers or oils
- Meets USP Class VI criteria

Typical Applications

- Aseptic filling and dispensing systems
- Diagnostic equipment
- Nuclear equipment
- Laboratory analytical instrumentation
- Cosmetic production
- Food and beverage processing
- Cell and tissue culture transport

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Tygon® 2475

Plasticizer Free Thermoplastic

Tygon® 2475 Standard Sizes

Part Number	ID	OD	Wall	Min. Bend Radius	Max. Working Pressure* 22°C (73°F)	Vacuum Rating at 22°C (73°F)
TY1,59PF4,76	1,59 mm (1/16“)	4,76 mm (3/16“)	1,59 mm (1/16“)	3,2 mm	5,8 bar	760 mmHg
TY3,18PF6,35	3,18 mm (1/8“)	6,35 mm (1/4“)	1,59 mm (1/16“)	6,4 mm	3,4 bar	760 mmHg
TY4,76PF7,94	4,76 mm (3/16“)	7,94 mm (5/16“)	1,59 mm (1/16“)	12,7 mm	2,7 bar	760 mmHg
TY6,35PF9,53	6,35 mm (1/4“)	9,53 mm (3/8“)	1,59 mm (1/16“)	19,0 mm	2,0 bar	760 mmHg
TY7,94PF11,11	7,94 mm (5/16“)	11,11 mm (7/16“)	1,59 mm (1/16“)	35,0 mm	1,2 bar	760 mmHg
TY9,53PF12,7	9,53 mm (3/8“)	12,7 mm (1/2“)	1,59 mm (1/16“)	44,0 mm	1,4 bar	760 mmHg
TY12,7PF19,05	12,7 mm (1/2“)	19,05 mm (3/4“)	3,18 mm (1/8“)	38,1 mm	2,0 bar	760 mmHg
TY15,88PF22,23	15,88 mm (5/8“)	22,23 mm (7/8“)	3,18 mm (1/8“)	57,0 mm	1,7 bar	760 mmHg
TY19,05PF25,4	19,05 mm (3/4“)	25,4 mm (1“)	3,18 mm (1/8“)	83,0 mm	1,4 bar	760 mmHg
TY25,4PF34,93	25,4 mm (1“)	34,93 (1-3/8“)	4,76 mm (3/16“)	82,5 mm	1,4 bar	760 mmHg

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599

Typical Physical Properties of Tygon® 2475

Property	ASTM Method	Value of Rating
Durometer Hardness	D2240-97	72° Shore A, 15s
Color	-	clear
Max. Recommended Operating Temp.	-	52° C
Brittleness by Temperature	D746-95	78° C
Low Temperature Flexibility	D380-87	-70°C
Water Absorbtion 23°C for 24 hours	D570-95	<0,01%

Unless otherwise noted, all tests were conducted at room temperature 73°F (23°C). Values shown were determined on 0.075" (1.905 mm) thick extruded strip or 0.075" (1.905 mm) thick molded ASTM plaques or molded ASTM durometer buttons.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressure, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

Sterilization Methods

Gas (Ethylene Oxide)	Yes
Radiation	up to 45 kGy

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