



Low particle deposits and high chemical resistance



Higher pressure capabilities

Tygon® 2475 IB high pressure thermoplastic tubing is engineered with textile reinforcement to withstand higher pressures. Using the same smooth inner fluid contact layer as Tygon® 2475, Tygon 2475 IB may be successfully used for higher pressure applications such as single use UF/DF systems and chromatography systems.

No added plasticizers for lower potential extractables

Tygon® 2475 IB is formulated without the addition of softening agents which may extract, 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 clear construction of Tygon® 2475 IB tubing allows visual inspection of the fluid path to ensure consistency of flow. Tygon 2475 IB has lower gas permeation than standard silicone tubing, protecting sensitive fluids from oxidation.

Low wetting and ultra smooth

The low surface energy of Tygon® 2475 IB 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 I. B has very low absorption of aqueous substances which minimizes the risk of fluid alteration in single use or repeat use applications.

Tested biocompatibility

Tygon® 2475 IB meets the requirements of USP <88> Class VI, and/or USP <87>, and/or ISO 10993-5.

Features and Benefits

- No added plasticizer
- Tough braid reinforcement for elevated working pressures
- Meets the requirements of USP <88> Class VI, and/or USP <87>, and/or ISO 10993-5

Typical Applications

- Deionized water systems
- Aseptic fill lines
- Cell harvest and media processing
- Water for Injection (WFI) transport
- Preservative fill lines
- Chromatography and UF/DF systems
- Pharmaceutical and cosmetic processing
- Chemical transfer

Tygon® 2475 IB Standard Sizes

Part Number	ID	OD	Wall	Min. Bend Radius	Max. Working Pressure* 22°C (73°F)	Vacuum Rating at 22°C (73°F)
TY6,35PF12,7IB	6,35 mm (1/4")	12,7 mm (1/2")	3,18 mm (1/8")	9,5 mm	15,5 bar	760 mmHg
TY9,53PF15,88IB	9,53 mm (3/8")	15,88 mm (5/8")	3,18 mm (1/8")	25,4 mm	14,5 bar	760 mmHg
TY12,7PF19,05IB	12,7 mm (1/2")	19,05 mm (3/4")	3,18 mm (1/8")	25,4 mm	15,9 bar	760 mmHg
TY15,88PF22,23IB	15,88 mm (5/8")	22,23 mm (7/8")	3,18 mm (1/8")	44,5 mm	9,3 bar	760 mmHg
TY19,0PF27,0IB	19,0 mm	27,0 mm	4,0 mm	31,8 mm	9,3 bar	760 mmHg
TY25,4PF34,93IB	25,4 mm (1")	34,93 mm (1-3/8")	4,76 mm (3/16")	88,9 mm	8,6 bar	635 mmHg

*Working pressures are calculated at a 1:4 ratio relative to burst pressure using ASTM D1599

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 pressures, 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.

Typical Physical Properties of Tygon® 2475 IB Tubing

Property	ASTM Method	Value of Rating
Durometer Hardness	D2240-97	72° Shore A, 15s
Color	-	clear
Maximum Recommended Operating Temperature	-	125 °F (52°C)
Brittleness by Impact Temperature	D746-95	-108°F (-78°C)
Low Temperature Flexibility	D380-87	-74°F (-70°C)
Water Absorption, % 24 hrs. @ 23°C	D570-95	<0,01

Sterilization Methods

Gas (Ethylene Oxide)	Yes
Gamma	45 kGy

OPTUBUS GmbH – www.optubus.com – info@optubus.com

OPTUBUS believes that the information in this technical data sheet is an accurate description of the typical uses of the product. OPTUBUS, however, disclaims any liability for incidental or consequent damages, which may result from the use of the product that are beyond its control. Therefore it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficiency and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.