

TYGON® 2475 High-Purity Tubing

Overview

TYGON® 2475 high-purity tubing is a plasticizer-free tubing utilizing the latest polymer technology to provide an optical clear and flexible tubing choice for sensitive fluid transfer applications. TYGON® 2475 is hydrophobic and will resist the absorption and adsorption of aqueous fluids. The reduction in sorption minimizes the risk of fluid alteration in single or repeated use applications. The smooth inner surface of TYGON® 2475 inhibits particulate entrapment on the tubing wall and reduces the potential for bacterial growth and contamination.

Features and Benefits

- Exceptionally low absorption and adsorption compared to silicone
- Smooth inner surface inhibits particulate entrapment
- Environmentally safe to dispose and reduces disposal costs
- Highly resistant to aggressive cleaners and sanitizers
- Plasticizer free
- Meet all USP Class VI and FDA criteria



Typical Applications

- Aseptic filling and dispensing systems
- Cosmetic production
- Diagnostic equipment
- Food & beverage processing
- Laboratory analytical instrumentation
- Nuclear equipment
- Infusion sets for parenteral and drugs
- Cell and tissue culture transport



Sterilization Methods

Gas (Ethylene Oxide) : Yes
 Radiation : Up to 45 kGy

Typical Physical Properties of TYGON 2475 Tubing

Property	Value	Test Method
Colour	Clear	-
Durometer Hardness Shore A, 15 seconds	72	ASTM D 2240-97
Continuous Operating Temperature, °F (°C)	125 (52)	-
Brittleness at Temperature, °F (°C)	-108 (-78)	ASTM D 746-95
Low Temperature Flexibility, °F (°C)	-94 (-70)	ASTM D 380-87
Water Absorption, % 24 hrs. @ 23°C	<0.01	ASTM D 570-95

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

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

Dimensional Guidance of TYGON 2475 Tubing

Part Number	I.D.	O.D.	Wall Thickness	Length	Minimum Bend Radius	Maximum Working Pressure	Vacuum Rating of Mercury @	
	In. (mm)	In. (mm)	In. (mm)	Ft. (M)	In. (mm)	23 °C or 73 °F psi (bar)	In. at 73 °F	mm at 23 °C
ACG00003	1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50 (15.2)	1/8 (3)	85 (5.8)	29.9	760
ACG00007	1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50 (15.2)	1/4 (6)	50 (3.4)	29.9	760
ACG00012	3/16 (4.8)	5/16 (7.9)	1/16 (1.6)	50 (15.2)	1/2 (13)	40 (2.7)	29.9	760
ACG00017	1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50 (15.2)	3/4 (19)	30 (2.06)	29.9	760
ACG00022	5/16 (7.9)	7/16 (11.1)	1/16 (1.6)	50 (15.2)	1-3/8 (35)	18 (1.2)	29.9	760
ACG00027	3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50 (15.2)	1-3/4 (44)	20 (1.4)	29.9	760
ACG00038	1/2 (12.7)	3/4 (19.0)	1/8 (3.2)	50 (15.2)	1-1/2 (38)	29 (2)	29.9	760
ACG00046	5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50 (15.2)	2-1/4 (57)	25 (1.7)	29.9	760
ACG00053	3/4 (19.0)	1 (25.4)	1/8 (3.2)	50 (15.2)	3-1/4 (83)	21 (1.4)	29.9	760
ACG42064	1 (25.4)	1-3/8 (34.9)	3/16 (4.8)	25 (7.6)	3 (82)	20 (1.4)	29.9	760

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.