



Taste and Odor Free Long Life Tubing



Taste and Odor Free, Long Life Tubing for Food and Beverage Dispensing

Formulated to withstand extreme temperatures from -59°C (-75°F) to +135°C (+275°F), Tygon® E-65-F tubing will not crack or deteriorate when used in demanding food and beverage applications. Extremely flexible, it resists kinks and retains its shape while installing quickly and easily. Its excellent flexural fatigue resistance makes it the absolute best choice for use in peristaltic pumps often found in dispensing equipment.

Sensory Profile: Taste and Odor Free

Tygon® E-65-F was submitted to a sensory analysis by an independent and objective party and the results indicate a taste free and odor free profile for applications with cola syrup and equivalent products, and also applications with milk and similar dairy products.

Excellent Chemical Resistance

Tygon® E-65-F tubing provides resistance to many harsh food media, including some animal and vegetable oils. It has excellent acid, alkali, and cleaner solution resistance, and is compatible with numerous oxidizing agents such as peroxide, hypochlorite and ozone.

Regulatory Compliance

- NSF 51
- Meets the applicable requirements of FDA Food Additive Regulations and Regulation (EC) No 1935/2004 for its intended use



Features and Benefits

- Taste and odor free
- Long flex life in peristaltic pumps
- Temperature resistant from -59°C (-75°F) to +135°C (+275°F)
- Compatible with virtually all common sanitizers and cleaners
- Chemically compatible with a wide range of food types and cleaners

Typical Applications

- Food and beverage dispensing

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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.

Tygon® E-65-F Standard Sizes

Part Number	ID	OD	Wall	Min. Bend Radius	Max. Working Pressure* 22°C (73°F)	Vacuum Rating at 22°C (73°F)
TY1,59EF4,76	1,59 mm (1/16")	4,76 mm (3/16")	1,59 mm (1/16")	4,8 mm	2,2 bar	760 mmHg
TY6,35EF9,53	6,35 mm (1/4")	9,53 mm (3/8")	1,59 mm (1/16")	25,0 mm	0,9 bar	760 mmHg
TY9,53EF15,88	9,53 mm (3/8")	15,88 mm (5/8")	3,18 mm (1/8")	47,6 mm	0,76 bar	635 mmHg
TY19,05EF25,40	19,05 mm (3/4")	25,4 mm (1")	3,18 mm (1/8")	85,7 mm	0,69 bar	635 mmHg
TY30,00EF45,00	30,0 mm (1-1/8")	45,0 mm (1-3/4")	7,5 mm (5/16")	216,0 mm	N/A	N/A

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

Typical Physical Properties of Tygon® E-65-F

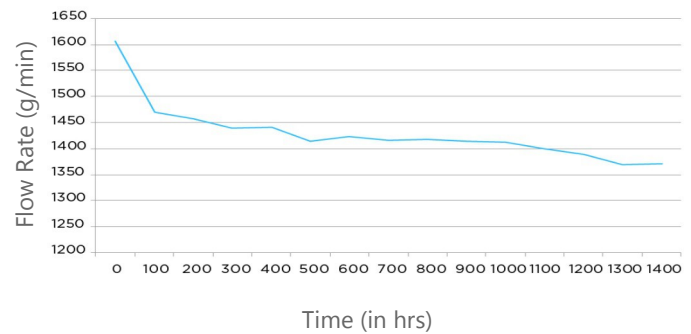
Property	ASTM Method	Value of Rating
Durometer Hardness	D2240	65° Shore A, 15s
Color	-	Opaque White
Tear Resistance	D1004	170 lbft/inch
Specific Gravity	D792	0.89
Water Absorption 23°C for 24 hours	D570	1.5 %
Compression Set Constant Deflection 70° C for 22 hours	D395	36,00%
Max. Recommended Operating Temp.	-	135° C
Low Temp Flexibility	D380	-80° C

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. Size of tubing tested is 1/8" ID x 1/4" OD.

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.

Peristaltic Pump Tubing Life

Test conditions: 73+°F at 50% relative humidity, 600rpm, 0psi



Testing was stopped at 1400hrs; the tubing was still functioning and maintained flow rate stability

TYGON® E-65-F TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.

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