



Tygon® E-1000

Ultra-Soft Laboratory Tubing

Optimal selection for complex laboratory set-ups

Soft and flexible, Tygon® E-1000 Non-DEHP Laboratory Tubing delivers the same superior performance you have come to expect from Tygon tubing. Tygon E-1000 is an excellent solution for applications requiring complicated laboratory set-ups with sharp radius curves and multiple directional changes. It resists twisting and collapse, which are common problems when using other tubing products. In addition, Tygon E-1000 resists embrittlement even at temperatures as low as -67°F (-55°C).

Ideal for low-torque peristaltic pumps

The extremely low durometer of Tygon® E-1000 provides minimal resistance to compression. This feature is ideal when using low-torque or battery-driven peristaltic pumps. Tygon E-1000 provides an excellent alternative to silicone tubing where corrosive chemicals are used. In typical pump applications, Tygon E-1000 will typically outlast silicone tubing by a margin of 2 to 1.

Safe for food contact

Tygon® E-1000 is compliant with United States FDA food contact criteria. In addition, Tygon S3™ E-LFL carries NSF®-51 certification for use in commercial food processing applications. For complete compliance information and appropriate use instructions, please refer to the detailed document of compliance which can be obtained by contacting Saint-Gobain.

Features / Benefits

- Soft and flexible for lab set-ups
- Flexible at low temperatures
- Resistant to corrosive chemicals for laboratory applications
- Low durometer for use in low-torque pump applications
- Meets FDA requirements for food contact

Single-use Applications

- Synthesis and research set ups
- Analytical instruments
- Buffer solutions
- Peristaltic pumps
- Vent and drain lines

Typical Physical Properties®

Property	ASTM Method	Tygon® E-1000 Value or Rating
Color	-	Clear
Durometer Hardness (Shore A), 15s	D2240	40
Maximum Recommended Operating Temperature °F (°C)	-	125 (52)
Brittle Temperature, °F (°C)	D746	-67 (-55)
Water Absorption, % 24 hrs at 73°F (23°C)	D570	0.29

Unless otherwise noted, all tests were conducted at room temperature (73°F/23°C). Values shown were determined on 0.075"/1.9 mm thick extruded strip or 0.075"/1.9 mm thick molded ASTM plaques or molded ASTM durometer buttons.

Relative Chemical Resistance Properties For Tygon® E-1000*

Acids			Bases			Salts	Alcohols	Ketones
conc.	med.	weak	conc.	med.	weak			
F	E	E	E	E	E	E	F	U

E = Excellent F = Fair U = Unsatisfactory *All tests conducted at room temperature.

Sterilization Methods

Gas (Ethylene Oxide)	Yes
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Tygon® E-1000 Inventoried Sizes

Saint-Gobain Part Number	I.D.		O.D.		Wall Thickness	Length	Minimum Bend Radius	Maximum Working Pressure		Vacuum Rating of Mercury at	
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	ft. (m)	in. (mm)	psi at 73°F	bar at 23°C	in at 73°F	mm at 23°C
ADK00003	1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	1/8 (3)	26	1.8	29.9	760
ADK00007	1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	3/8 (10)	16	1.1	29.9	760
ADK00012	3/16 (4.8)	5/16 (7.9)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	5/8 (16)	10	0.7	15	381
ADK00017	1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	1 (25)	8	0.6	7	178
ADK00019	1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	1/8 (3.2)	1/8 (3.2)	50 (15)	5/8 (16)	14	0.9	29.9	760
ADK00022	5/16 (7.9)	7/16 (11.1)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	1 3/8 (35)	7	0.5	5	127
ADK00027	3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	1 3/4 (45)	7	0.5	3	76
ADK00029	3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	1/8 (3.2)	1/8 (3.2)	50 (15)	1 1/8 (29)	11	0.8	15	381
ADK00036	1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	50 (15)	2 7/8 (73)	6	0.4	2	51
ADK00038	1/2 (12.7)	3/4 (19.0)	1/8 (3.2)	1/8 (3.2)	1/8 (3.2)	50 (15)	1 3/4 (45)	8	0.6	7	178

Additional sizes available upon request

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