

## Tygon<sup>®</sup> LP-1200

# Clear, High-Performance Fuel Tubing for Small Engines

### Designed to Meet Regulatory Standards for Clean Air

Tygon® LP-1200 Low Permeation Fuel Tubing is specially designed to meet new EPA and CARB evaporative emission standards of 15g/m²/day. The patent-pending design and robust multi-layer construction offers superior fitting retention and resistance to swelling, hardening and cracking caused by hydrocarbon-based fluids.

Available in both standard and custom sizes and colors, Tygon LP-1200 is ideal for lawn and garden power equipment, small engine fuel lines, and lubricating oil and grease transfer lines. It meets ANSI BI75.1 Annex D standard.

### **Available Sizes**

Tygon LP-1200 is available in five standard stock sizes:

- 0.080" (2.032 mm) I.D. x 0.140" (3.556 mm) O.D.
- 3/32" (2.381 mm) I.D. x 3/16" (4.762 mm) O.D.
- 1/8" (3.175 mm) I.D. x 1/4" (6.350 mm) O.D.
- 3/16" (4.762 mm) I.D. x 5/16" (7.937 mm) O.D.
- 1/4" (6.350 mm) I.D. x 3/8" (9.525 mm) O.D.

### **Typical Applications**

- Brushcutters
- Chainsaws
- Cut-off machines
- · Earth/ice augers
- Edgers
- · Engine drills
- Hedge and weed trimmers
- Leaf blowers
- Pole pruners
- Split-boom products
- Tillers

# EXCELLENCE BY DESIGN



### Features and Benefits

- Transparent
  - Easy to diagnose fuel flow or leak problems
- High purity fluoropolymer inner liner
  Reduces the risk of fuel system fouling
  - Reduces the risk of fuel system fouling from extractable solids found in typical rubber products
- Superior fuel resistance and compatible with ethanol-enhanced fuels
  - Worry-free operation
- Excellent fitting retention
  100% seal for optimum safety
- Superior flexibility
  - Easy assembly, routing and optimized fuel pick-up
- Excellent elasticity
  - Prevents "necking" from over-stretching during installation
- Submersible\*
  - Applicable with most fuel applications
- UV resistant: Meets ANSI BI75.1 Annex D Standard UV testing
  - Durable; long service life
- EPA and CARB approved
  - Meets low permeation standards of 15g/m²/day

\*Not recommended for reuse in higher temperature applications.



### Tygon® LP-1200

### www.processsystems.saint-gobain.com

Tygon® LP-I200

Saint-Gobain Part Number	I.D. (in.)	O.D. (in.)	Wall Thickness (in.)	Length (feet)	Min. Bend Radius (in.)	Max.Working Pressure at 73°F (psi)	Vacuum Rating mm of Mercury (Hg) at 73°F
ALR00700	0.080	0.140	0.030	50	0.225*	70°	29.9
ALR00165	3/32	3/16	0.047	50	0.250	65	29.9
ALR00007	1/8	1/4	1/16	50	0.375	60	29.9
ALR00012	3/16	5/16	1/16	50	0.500	45	29.9
ALR00017	1/4	3/8	1/16	50	0.675*	30*	29.9

<sup>&</sup>quot;Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599.

### Typical Physical Properties

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Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 Sec	D2240	78
Tensile Strength, psi (MPa)	D412	3,600
Ultimate Elongation, %	D412	475
Tear Resistance, lb-f/in. (kN/m)	D1004	500
Specific Gravity	D792	1.27
Water Absorption, % 24 hrs. @ 23°C	D570	0.7
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs.	D395	35
Brittleness Temp., °F (°C)	-	-20 (-28)
Maximum Recommended Operating Temp. °F (°C)	-	180 (82)
Tensile Stress @ 100% Elongation, psi (MPa)	D412	668
Tensile Set, %	D412	90
Color	-	Translucent
Brittleness by Impact, °F (°C)	D746-98	< -130 (-90)
Low Temp Flex, °F (°C)	-	-40 (-40)
	XVIIX	VIIIXV

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip, 0.075" thick molded ASTM plaques or molded ASTM durometer buttons. Size of tubing tested is 1/8" I.D.  $\times$  1/4" O.D.

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.

### **Product Characteristics**

Opacity	Flammability Rating	Fuel Permeation (total tube), g/m²/d		
Translucent	111 04 11P	CA Phase II, 40°C	7	
Transident	UL 94 HB	CE 10, 23°C	10	

### Regulatory Compliance

40 CFR 1060 EPA Regulation	Conforms
CA SORE Chapter 15, Article 1	Conforms
CA Component Executive Order Number	-
EPA Certification Number	EPA-SGN-120



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NOTE: The data and details given in this document are correct and up to date. This document is intended to provide information about the product and possible applications. This document is not the product specification and does not provide specific features, nor does it guarantee product performance in specific applications. Saint-Gobain cannot anticipate or control the conditions of the field and for this reason strongly recommends that practical tests are conducted to ensure that the product meets the requirements of a specific application.

Tygon° is a registered trademark.

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