

Tygon® LP-1100

Designed for Gasoline-Powered, Ground-Supported Equipment

Innovative Tygon low permeation fuel tubing is designed to meet the EPA and CARB evaporation emission standards of 15mg/m²/day. Tygon® LP-1100 tubing has superior resistance to fuels and industrial lubricants; the fluoropolymer liner is compatible with higher ethanol blend gasolines up to 100%. Its robust multi-layer design and construction is resistant to swelling, hardening and cracking caused by hydrocarbon-based fluids or sour gas.

Tygon LP-1100 tubing is abrasion, cut and tear resistant for longer service life. Ideal for lawn and garden power equipment, small engine fuel lines as well as lubricating oil and grease transfer lines, Tygon LP-1100 tubing is ozone and UV light resistant. It is highly flexible, easy to install and offers excellent fitting retention. Tygon LP-1100 tubing is designed for fuel transfer line only, and is not recommended for fuel submersible applications.

Regulatory Compliance

Tygon LP-1100 tubing is EPA and CARB certified to meet permeation emission standards of 15g/m²/day.



Features and Benefits

- Conforms to new government regulatory standards for clean air
- Fluoropolymer liner compatible with higher ethanol blend gasoline
- Robust multi-layer design and construction
- Reduces hydrocarbon vapors escaping or permeating into the atmosphere
- Wide temperature range from -20°F to 180°F (-28.9°C to 82.2°C)
- Reduces photochemical smog
- High abrasion, cut and tear resistance for longer service life
- Compatible with 100% ethanol

Typical Applications

- Small engine fuel transfer lines
- Lawn and garden power equipment
- Lubricating oil and grease transfer lines
- Lawn mowers
- Riding mowers
- Motorcycles

Tygon LP-1100

Part Number	ID	OD	Wall Thickness	Length
	(in.)	(in.)	(in.)	(ft.)
AY600700	2/25	7/50	3/100	50
AY600165	3/32	3/16	3/64	50
AY600007	1/8	1/4	1/16	50
AY600012	3/16	5/16	1/16	50
AY600017	1/4	3/8	1/16	50

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

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, Shore A, 15s	D2240	69
Tensile Strength, psi (MPa)	D412	2,400 (16.5)
Ultimate Elongation, %	D412	450
Tear Resistance, lb-f/in (kN/m)	D1004	167 (29.0)
Specific Gravity	D792	1.29
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.49
Compression Set Constant Deflection, % at 158°F (70°C) for 22 hrs.	D395 Method B	65
Brittleness by Impact Temp., °F (°C)	D746	-35 (-37)
Maximum Recommended Operating Temp., °F (°C)	—	180 (82)
Tensile Stress, at 100% Elongation, psi (MPa)	D412	910 (6.3)
Tensile Set, at 75% Elongation	D412	50
Color	—	Yellow

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.

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/m ² /d	
		CA Phase II, 40°C	CE 10, 40°C
Translucent	UL 94 HB	<15	<15
		<15	<15

Regulatory Compliance

40 CFR 1060 EPA Regulation	Conforms
CA SORE Chapter 15, Article I	Conforms
CA Component Executive Order Number	Q-19-068
CA Component Executive Order Size Limitations	2/25" ID and Above
EPA Certification Number	SGN-ENAPNR-0A-03
EPA Certification Size Limitations	2/25" ID and Above
ANSI B175.2 Annex D	Conforms

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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.