

# Tygon® LP-1200

## Clear, High-Performance Fuel Tubing for Small Engines

### Designed to Meet Clean Air Regulatory Standards and Maintain Flexibility in Frigid Temperatures

Tygon LP-1200 is low permeation fuel tubing specially designed to meet new EPA and CARB evaporative emission standards of 15g/m<sup>2</sup>/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.

Tygon LP-1200 is also designed to retain flexibility in frigid temperatures. Its formulation helps to prevent rupture while maintaining tube flexibility, lowering the risk of fuel system failure in cold weather conditions.

Available in both standard and custom sizes and colors, Tygon LP-1200 tubing is ideal for lawn and garden power equipment, small engine fuel lines, and lubricating oil and grease transfer lines. It meets ANSI B175.1 Annex D standard.

### Available Sizes

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

- 2/25" (2.032 mm) ID x 7/50" (3.556 mm) OD
- 3/32" (2.381 mm) ID x 3/16" (4.762 mm) OD
- 1/8" (3.175 mm) ID x 1/4" (6.350 mm) OD
- 3/16" (4.762 mm) ID x 5/16" (7.937 mm) OD
- 1/4" (6.350 mm) ID x 3/8" (9.525 mm) OD

### Typical Applications

- Brush Cutters
- Chainsaws
- Cut-off Machines
- Earth/Ice Augers
- Edgers
- Engine Drills
- Hedge and Weed Trimmers
- Leaf Blowers
- Pole Pruners
- Split-boom Products
- Tillers



### Features and Benefits

- Transparent
  - Easy to diagnose fuel flow or leak problems
- Adaptable to Frigid Conditions
  - Maintains flexibility in cold weather
- High purity fluoropolymer inner liner
  - 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 B175.1 Annex D Standard UV testing
  - Durable; long service life

\* Not recommended for reuse in higher temperature applications.

## Tygon LP-1200

Part Number	ID		OD		Wall Thickness		Length		Min. Bend Radius		Max. Working Pressure		Vacuum Rating	
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(ft.)	(m)	(in.)	(mm)	73°F (psi)*	23°C (bar)	inHg at 73°F	mmHg at 23°C
ALR00700**	2/25	2.032	7/50	3.556	3/100	0.762	50	15.24	1/4	6.350	70	4.8	29.9	1x10 <sup>-4</sup>
ALR00165	3/32	2.381	3/16	4.762	3/64	1.194	50	15.24	1/4	6.350	65	4.5	29.9	1x10 <sup>-4</sup>
ALR00007	1/8	3.175	1/4	6.350	1/16	1.588	50	15.24	3/8	9.525	60	4.1	29.9	1x10 <sup>-4</sup>
ALR00012	3/16	4.762	5/16	7.937	1/16	1.588	50	15.24	1/2	12.700	45	3.1	29.9	1x10 <sup>-4</sup>
ALR00017	1/4	6.350	3/8	9.525	1/16	1.588	50	15.24	5/8	15.875	30	2.1	29.9	1x10 <sup>-4</sup>

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

\*\* ALR00700 is not 2020 CARB certified.

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness, Shore A, 15s	D2240	78
Tensile Strength, psi (MPa)	D412	3,600 (24.8)
Ultimate Elongation, %	D412	475
Tear Resistance, lb-f/in (kN/m)	D1004	500 (87.5)
Specific Gravity	D792	1.27
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.70
Compression Set Constant Deflection, % at 158°F (70°C) for 22 hrs.	D395 Method B	35
Brittleness Temp., °F (°C)	—	-20 (-28)
Maximum Recommended Operating Temp., °F (°C)	—	180 (82)
Tensile Stress, at 100% Elongation, psi (MPa)	D412	668 (4.6)
Tensile Set, at 75% Elongation	D412	90
Color	—	Translucent
Brittleness by Impact Temp., °F (°C)	D746-98	< -130 (< -90)
Low Temperature Flexibility, °F (°C)	—	-40 (-40)

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, 0.075" (1.905 mm) thick molded ASTM plaques or molded ASTM durometer buttons.

## Product Characteristics

Opacity	Flammability Rating	Fuel Permeation (total tube), g/m <sup>2</sup> /d	
Translucent	UL 94 HB	CA Phase II, 40°C	<15
		CE 10, 40°C	<15

## Regulatory Compliance

40 CFR 1060 EPA Regulation	Conforms
CA SORE Chapter 15, Article I	Conforms
CA Component Executive Order Number	Q-19-067
CA Component Executive Order Size Limitations	3/32" ID and above
EPA Certification Number	EPA-SGN-120
ANSI B175.1 Annex D Standard	Conforms

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.

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