

Fuel Tube meets CARB Emission Standards



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/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.Tygon LP-1200 is also designed to retain flexibility in frigid temperatures. Its formulation helps to prevent rupture while mantaining 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.

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

Clear, High-**P**erformance Fuel Tubing



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 - Worryfree 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.

OPTUBUS GmbH - www.optubus.de - info@optubus.de

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.



Fuel Tube meets CARB Emission Standards

Tygon® LP-1200 Tubing Standard Sizes

Part Number	ID	OD	Wall	Min. Bend Radius	Pressure* 22°C (73°F)	Rating at 22°C (73°F)
TY2,03LP3,56**	2,03 mm (2/25")	3,56 mm (7/50")	0,76 mm (3/100")	6,3 mm	4,8 bar	760 mmHg
TY2,38LP4,76	2,38 mm (3/32")	4,76 mm (3/16")	1,19 mm (3/64")	6,3 mm	4,5 bar	760 mmHg
TY3,18LP6,35	3,18 mm (1/8")	6,35 mm (1/4")	1,59 mm (1/16")	9,5 mm	4,1 bar	760 mmHg
TY4,76LP7,94	4,76 mm (3/16")	7,94 mm (5/16")	1,59 mm (1/16")	12,7 mm	3,1 bar	760 mmHg
TY6,35LP9,53	6,35 mm (1/4")	9,53 mm (3/8")	1,59 mm (1/16")	15,8 mm	2,1 bar	760 mmHg

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

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.

Typical Physical Properties of Tygon® LP-1200 Tubing Product Characteristics

Property	ASTM Method	Value of Rating	Opacity	Flammability Rating	Fuel Permeation (total Tube)	
Durometer Hardness	D2240	78° Shore A, 15s	Translucent	UL 94 HB	CA Phase II, 40°C	<15 g/m²/d
Color	-	Translucent	iransiucent	UL 94 HB	CE 10, 40°C	$<15 \text{ g/m}^2/\text{d}$
Specific Gravity	D792	1,27				
Water Absorption, % 24 hrs. @ 23°C	D570	0.70	Regulatory Compliance			
Compression set Constant	D395 Method B	35,00%	40 CFR 1060 EPA Regulation			Conforms
Deflection, 22 hrs. @ 70°C			CA SORE Chapter 15, Article I			Conforms
Tensile Strength	D412	24,8 MPa (3.600 psi)	CA Component Executive Order Number			Q-19-067
Ultimate Elongation	D412	475,00%	CA Component Executive Order Size Limitations		3/32" ID	
Tear Resistance	D1004	87,5 kN/m (500 lb-f/ln)			and above	
Tensile Stress	D412	4,6 MPa (668 psi)	EPA Certification Number			EPA-SGN-120
@100% Elongation			ANSI B175.1 Annex D Standard			Conforms
Tensile Set @75% Elongation	D412	90				
Maximum Recommended Operating Temperature	-	82 °C (180°F)				
Brittleness by Impact Temperature	D746-98	<-90°C (-130°F)				
Low Temperature Flexibility	-	-40°C (-40°F)				
Brittleness Temperature	-	-28°C (-20°F)				

Unless otherwise noted, all tests were conducted at room temperature 23°C (73°F). Values shown were determined on 1.905 mm (0,075") thick extruded strip or 1.905 mm (0,075") thick molded ASTM plaques or molded ASTM durometer buttons.

OPTUBUS GmbH - www.optubus.de - info@optubus.de

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.

^{**}TY2,03LP3,56 is not 2020 CARB certified.