

# Tygon® LP-1600

## Designed Specifically for Outboard Marine Applications

Tygon® LP-1600 tubing low permeation fuel tubing meets the government's emission standards for clean air. Specially formulated for marine outboard fuel delivery applications, Tygon® LP-1600 tubing is EPA and CARB certified. Featuring a highly fuel-resistant, ethanol-compatible inner layer, Tygon® LP-1600 tubing has a robust design that ensures safe fuel transfer from the tank to the engine and provides both excellent fitting retention and fast, easy assembly.

### Regulatory Compliance

Tygon® LP-1600 tubing is EPA and CARB certified to meet permeation emission standards of 15g/m<sup>2</sup>/day. This tubing also meets EPA B1-15 and CARB Outdoor Marine Tank (OMT) above-deck ratings for the marine industry, and American Boat and Yacht Council (ABYC) H-24 standards. Tygon® LP-1600 tubing conforms to SAE J1527 B1 standards.



### Features and Benefits

- Thermoplastic multi-layer technology designed to provide the best barrier construction
- Excellent resistance to hydrocarbon-based fuels (leaded and unleaded fuels)
- Compatible with 100% ethanol
- Wide temperature range from -20°F to 165°F (-28.9°C to 73.9°C)
- Ozone and UV light resistant to prevent premature aging
- High abrasion, cut and tear resistance for longer service life
- Superior flexibility and kink resistance
- Custom sizes and colors available

### Typical Applications

- Marine boats with above-deck outboard engines
- Personal watercraft – Jet Skis, WaveRunners
- Portable marine fuel delivery system

## Tygon® LP-1600

Part Number	ID	OD	Wall Thickness	Length
	(in.)	(in.)	(in.)	(ft.)
AZE00023	5/16	1/2	3/32	50
AZE00028	3/8	9/16	3/32	50
AZE01028	3/8	9/16	3/32	5
AZE27028	3/8	9/16	3/32	90
AZE5M028	3/8	9/16	3/32	1-1/2
AZEEQ012	3/16	5/16	1/16	2-1/4

\*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	72
Tensile Strength, psi (MPa)	D412	2,700 (18.6)
Ultimate Elongation, %	D412	300
Specific Gravity	D792	1.32
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.47
Maximum Recommended Operating Temp., °F (°C)	—	180 (82)
Tensile Stress, at 100% Elongation, psi (MPa)	D412	1,300 (9.0)
Color	—	Gray

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.

**TYGON® LP-1600 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.**

## Product Characteristics

Opacity	Flammability Rating	Fuel Permeation (total tube), g/m <sup>2</sup> /d
Opaque	UL 94 HB	CE 10, 23°C 2.2

## Regulatory Compliance

40 CFR 1060 EPA Regulation	Conforms
EPA Certification Number	SGN-EVAPNR-OA-01
EPA Certification Size Limitations	5/16" ID and Above
ANSI B175.2 Annex D	Conforms
ISO 8469	Meets B1
ABYC H-24 (SAE J1527 Style R4)	Conforms
CARB Outboard Marine Tank	G-10-030

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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.