





# Tygon<sup>®</sup> 2375

# **Chemical Resistant Tubing for Food and Beverage Applications**

### **Unequaled Chemical Resistance**

In order to be effective in highly regulated industries such as hospitality and institutional cleaning, dispensing tubing materials must be resistant to the chemicals found in various cleaners used during the sanitation process, as well as those found in the food product itself. Depending on the food and beverage product, cleaner, and/or temperature to which the tube is exposed, the tubing may require varying levels of chemical resistance. For example, products with alcoholic or acidic content, such as wine or orange juice, can degrade or damage the tubing at a faster rate than products such as iced tea.

Tygon® 2375 Chemical Resistant Tubing for food and beverage applications offers an unequaled combination of chemical resistance, clarity and flexibility. Tygon 2375 Tubing is virtually unaffected by acids, bases, ketones, salts and alcohols (see Relative Chemical Resistance Properties chart on the back).

#### **Environmentally Friendly**

Tygon 2375 Chemical Resistant Tubing offers safe disposal. When properly incinerated, it does not release hazardous and corrosive hydrochloride gas, which contributes to acid rain.

#### Non-DEHP and Plasticizer-Free

Tygon 2375 Chemical Resistant Tubing is entirely free of plasticizers, eliminating fluid contamination as well as premature embrittlement and cracking common with many other flexible tubings.

#### Features and Benefits

- Outstanding chemical resistance
- Does not alter the food media taste
- Great flexibility and bend radius
- Non-DEHP for high purity
- Plasticizer-free for low extractables
- Safer disposal
  - Releases no harmful and corrosive hydrochloride gas
- Smoother inner surface
  - Provides better flow and inhibits particulate buildup
- Low sorption
  - Minimizes cross-contamination
- Clear tubing for easier and better observation

# Regulatory Compliance

- FDA CFR 177.1520 criteria for food and beverage use
- EU Regulation 10/2011\*
- NSF 51
- REACH

\*Not recommended for reuse in higher temperature applications.



Tygon® 2375

Part Number	I.D. (in.)	O.D. (in.)	Wall Thickness (in.)	Max. Working Pressure at 73°F (psi)°	Minimum Bend Radius (in.)	Vacuum Rating, In. of Mercury at 73°F	
AJK00002	1/16	1/8	1/32	40.0	1/4	29.9	
AJK00003	1/16	3/16	1/16	65.0	1/8	29.9	
AJK00004	3/32	5/32	1/32	25.0	1/4	29.9	
AJK00007	1/8	1/4	1/16	40.0	1/4	29.9	
AJK00009	5/32	7/32	1/32	20.0	1/4	29.9	
AJK00012	3/16	5/16	1/16	30.0	1/2	29.9	
AJK00017	1/4	3/8	1/16	25.0	3/4	29.9	
AJK00022	5/16	7/16	1/16	20.0	1-1/4	29.9	
AJK00027	3/8	1/2	1/16	17.0	1-1/2	20.0	
AJK00029	3/8	5/8	1/8	25.0	1-1/8	29.9	
AJK00038	1/2	3/4	1/8	25.0	1-1/2	29.9	
AJK00046	5/8	7/8	1/8	20.0	2-1/2	29.9	
AJK00053	3/4	ı	1/8	17.0	2-3/4	20.0	
AJK00064	I	1-3/8	3/16	19.0	3-1/4	25.0	

<sup>\*</sup>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	75						
Color	-	Clear						
Tensile Strength psi (MPa) (at break)	D412	1900 (13.1)						
Ultimate Elongation, %	D412	850						
Tear Resistance lb-f/inch (kN/m)	D1004	240 (42.0)						
Specific Gravity	D792	0.9						
Water Absorption, % 24 hrs. @ 23°C	D570	<0.01						
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs.	D395 Method B	100						
Brittleness By Impact Temp., °F (°C)	D746	-103 (<-75)						
Maximum Recommended Operating Temp., °F (°C)	-	130 (54)						
Low Temp. Flexibility, °F (°C)	_	-103 (-75)						
Tensile Modulus, @ 100% Elongation, psi (MPa)	D412	425 (2.9)						
Tensile Set, 75% of Ultimate Elongation, %	D412	300						

Unless otherwise noted, all tests were conducted at room temperature (73 °F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

## Relative Chemical Resistance Properties\*

T.b:	Acids				Bases			A     -   -   / - +	
Tubing	Conc.	Med.	Weak	Conc.	Med.	Weak	Salts	Alcohols Ketones	
Tygon 2375	F	Е	E	Е	Е	Е	Е	Е	F
Fluoroelastomers	Е	E	E	U	F	F	E	F	U
Urethane	U	U	U	U	F	F	F	U	U
PVC	F	E	E	Е	Е	Е	E	F	U
Thermoplastic Rubber	U	F	F	F	Е	E	Е	F	U
Neoprene	U	F	E	E	Е	E	Е	E	U
Nitrile Rubber	F	F	E	U	Е	E	Е	E	U
Silicone	U	U	U	U	F	F	F	F	U
EVA	U	F	E	F	E	E	Е	E	U

E = Excellent F = Fair U = Unsatisfactory

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® 2375 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

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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.

<sup>\*</sup>All tests conducted at room temperature.