

Tygon[®] 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 second page).

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 tubing products.



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 extractable
- 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

* For complete compliance information and appropriate use instructions, please refer to the detailed document of compliance.

** Not Recommended for use in higher temperature applications.

Tygon® 2375

Part Number	ID	OD	Wall Thickness	Minimum Bend Radius	Max. Working Pressure	Vacuum Rating
	(in)	(in)	(in)	(in)	73°F (psi)*	73°F (inHg)
AJK00002	1/16	1/8	1/32	1/4	40.0	29.9
AJK00003	1/16	3/16	1/16	1/8	65.0	29.9
AJK00004	3/32	5/32	1/32	1/4	25.0	29.9
AJK00007	1/8	1/4	1/16	1/4	40.0	29.9
AJK00009	5/32	7/32	1/32	1/4	20.0	29.9
AJK00012	3/16	5/16	1/16	1/2	30.0	29.9
AJK00017	1/4	3/8	1/16	3/4	25.0	29.9
AJK00022	5/16	7/16	1/16	1-1/4	20.0	29.9
AJK00027	3/8	1/2	1/16	1-1/2	17.0	29.0
AJK00029	3/8	5/8	1/8	1-1/8	25.0	29.9
AJK00038	1/2	3/4	1/8	1-1/2	25.0	29.9
AJK00046	5/8	7/8	1/8	2-1/2	20.0	29.9
AJK00053	3/4	1	1/8	2-3/4	17.0	20.0
AJK00064	1	1-3/8	3/16	3-1/4	19.0	25.0

* 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), 15 sec	D2240	75
Color	—	Clear
Opacity	—	Translucent
Tensile Strength, psi (MPa)	D412	1900 (13.1)
Ultimate Elongation, %	D412	850
Tear Resistance, lb-f/in (kN/m)	D1004	240 (42.0)
Specific Gravity	D792	0.90
Water Absorption, % at 73°F (23°C) for 24 hrs.	D570	0.04
Compression Set Constant Deflection, % at 158°F (70°C) for 22 hrs.	D395 Method B	100
Maximum Recommended Operating Temp., °F (°C)	—	130 (54)
Brittleness by Impact Temp., °F (°C)	D746	-103 (< -75)
Tensile Stress, psi (MPa) @ 100% Elongation	D412	425 (2.9)
Tensile Set, %	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*

Tubing	Acids			Bases			Salts	Alcohols	Ketones
	Conc.	Med.	Weak	Conc.	Med.	Weak			
Tygon® 2375	F	E	E	E	E	E	E	E	F
Fluoroelastomers	E	E	E	U	F	F	E	F	U
Urethane	U	U	U	U	F	F	F	U	U
PVC	F	E	E	E	E	E	E	F	U
Thermoplastic Rubber	U	F	F	F	E	E	E	F	U
Neoprene	U	F	E	E	E	E	E	E	U
Nitrile Rubber	F	F	E	U	E	E	E	E	U
Silicone	U	U	U	U	F	F	F	F	U
EVA	U	F	E	F	E	E	E	E	U

E = Excellent F = Fair U = Unsatisfactory
*All tests conducted at room temperature.

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 pressure, 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.