



Ether-PUR FLEX™ 84

Product Features

The Ether-PUR FLEX™ 84 product line is made from an ether based polyurethane resin. This material is much more abrasion and impact resistant than PVC while maintaining flexibility and clarity. Urethane also possesses a high level of chemical compatibility. Since this is a pure polyurethane resin, it contains no plasticizers and has a very low level of extractables making it a great product for high purity applications. This formulation CAN be used with aqueous solutions.

Ether-PUR FLEX™ 84 Tubing

- Clear and Flexible
- Tough; resists tearing and abrasion
- Superior resistance to hydrolytic degradation compared to Ester-PUR FLEX 85
- Flexible at low temperatures
- High impact resistance
- Pure polyurethane; contains no plasticizers and low levels of extractables
- Resistant to atmospheric ozone
- Complies with FDA CFR21 for food packaging

Typical Applications

- High-purity applications
- Instrumentation
- Distilled, deionized, demineralized or reverse osmosis-treated water
- Handling petroleum- based products
- Recommended for use with aqueous solutions

Specifications

All Ether-PUR FLEX™ 84 tubing products offer the following:

- Manufactured from ingredients whose usage is sanctioned by the U.S. Food & Drug Administration under Title 21 of the Code of Federal Regulations for food packaging applications, per the following:

Ingredients & CRF Paragraph No.	
Adhesives	175.300
Polyurethane resins	177.1680
Rubber articles intended for repeated use.	177.2600

Chemical Resistance

Ratings for ideal conditions 73°F / 25°C

Strong Mineral Acids	Fair
Organic Acids	Not Recommended
Weak Acids	Good
Bases - Weak	Good
Bases - Strong	Good
Solvents	Fair

Ether-PUR FLEX™ 84 Size & Physical Properties

Size Chart

Catalog Number	ID Size In.	OD Size In.	Wall	Operating Pressure PSIG 73°F	Case Qty. Ft.
8684-4170	1/16	1/8	1/32	90	100
8684-4240	1/8	3/16	1/32	58	100
8684-4245	1/8	1/4	1/16	92	100
8684-4290	3/16	1/4	1/32	48	100
8684-4295	3/16	5/16	1/16	72	100
8684-4335	1/4	3/8	1/16	76	100
8684-4340	1/4	7/16	3/32	80	100
8684-4345	1/4	1/2	1/8	92	100
8684-4390	5/16	7/16	1/16	56	100
8684-4400	5/16	9/16	1/8	84	100
8684-4430	3/8	1/2	1/16	48	100
8684-4440	3/8	5/8	1/8	76	100
8684-4465	7/16	5/8	3/32	56	100
8684-4505	1/2	5/8	1/16	34	100
8684-4515	1/2	3/4	1/8	64	100
8684-4565	5/8	13/16	3/32	44	100
8684-4570	5/8	7/8	1/8	50	100
8684-2605	3/4	1	1/8	48	50
8684-2640	7/8	1-1/8	1/8	38	50
8684-2675	1	1-1/4	1/8	34	50

Physical Properties

Properties	ASTM Method	Value Rating
Hardness; Shore A (+/- 5)	D2240	84
Vacuum		Not Recommended
Operating temperature range		-70°F - 175° F -56°C - 80°C
Maximum Working Pressure		73°F / 76PSI 125°F / 38PSI
Testing Size		1/4"ID x 1/16"W
Color		Transparent Natural
Odor		None
Taste		N/A
Specific Gravity; g/cm ³	D792	1.12
Tensile Strength; psi	D638	5500
Ultimate Elongation; %	D638	500
Flame Resistance	D568	Burns

* The above is accurate to the best of the Company's knowledge, however, these are typical values and should not be used as a certification. All materials should be tested for suitability in their intended use.