



Ester-PUR FLEX™ 85

Product Features

The Ester-PUR FLEX™ 85 product line is made from an ester 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 is NOT recommended for aqueous solutions.

Ester-PUR FLEX™ 85 Tubing

- Resistant to atmospheric ozone, aliphatic hydrocarbons and petroleum products
- Pure polyurethane; contains no plasticizers and low levels of extractables
- Complies with FDA CFR21 food packaging
- Tough; resists tearing and abraision
- Flexible at low teperatures

Typical Applications

- High-purity applications
- Fuel lines
- Instrumentation
- Cable jacketing
- Gas sampling lines
- NOT recommended for use with aqueous solutions

Specifications

All Ester-PUR FLEX™ 85 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	175.105
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

Ester-PUR FLEX™ 85 Size & Physical Properties

Size Chart

Catalog Number	ID Size In.	OD Size In.	Wall	Operating Pressure PSIG 73°F	Case Qty. Ft.
8685-4170	1/16	1/8	1/32	106	100
8685-4240	1/8	3/16	1/32	70	100
8685-4245	1/8	1/4	1/16	110	100
8685-4290	3/16	1/4	1/32	56	100
8685-4295	3/16	5/16	1/16	86	100
8685-4330	1/4	5/16	1/32	50	100
8685-4335	1/4	3/8	1/16	76	100
8685-4340	1/4	7/16	3/32	96	100
8685-4345	1/4	1/2	1/8	110	100
8685-4390	5/16	7/16	1/16	66	100
8685-4400	5/16	9/16	1/8	100	100
8685-4430	3/8	1/2	1/16	56	100
8685-4435	3/8	9/16	3/32	76	100
8685-4440	3/8	5/8	1/8	90	100
8685-4465	7/16	5/8	3/32	66	100
8685-4505	1/2	5/8	1/16	40	100
8685-4515	1/2	3/4	1/8	76	100
8685-4565	5/8	13/16	3/32	52	100
8685-4570	5/8	7/8	1/8	60	100
8685-2605	3/4	1	1/8	56	50
8685-2640	7/8	1-1/8	1/8	46	50
8685-2675	1	1-1/4	1/8	40	50

Physical Properties

Properties	ASTM Method	Value Rating
Hardness; Shore A (+/- 5)	D2240	85
Vacuum		Not Recommended
Operating temperature range		-70°F - 175° F -56°C - 85°C
Maximum Working Pressure		73°F / 76PSI 125°F / 38PSI
Testing Size		1/4"ID x 1/16"W
Color		Transparent Amber
Odor		Slight
Taste		N/A
Specific Gravity; g/cm ³	D792	1.20
Tensile Strength; psi	D638	5000
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.