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 abraison
- Flexible at low teperatures
- Meets REACH, ROHS and Proposition 65 requirements

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:

- Acceptable for food contact by the following standard: *Every substance selected to formulate the items below is either "generally recognized as safe" (GRAS), prior-sanctioned, subject to an effective Food Contact Notification (FCN), subject to a Threshold of Regulation (TOR) exemption, or identified on one or more following sections of Title 21 of the Code of Federal Regulations published by the U.S. Food and Drug Administration (FDA): 181.5, 181.27, 178.2010, 172.860, 174.5*
- Meets REACH, ROHS and Proposition 65 requirements

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

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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.

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