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PRODUCT BULLETIN

KYNAR® PVDF-POLYVINYLIDENE FLUORIDE

Manufactured from Kynar* polyvinylidene fluoride resin. This material offers excellent corrosion and chemical resistance at both ambient and elevated temperatures. PVDF is also inherently UV stable, mechanically tough, abrasion and flame resistant.

The following physical property information is based on typical values of the base polyvinylidene fluoride resin.

Applications Include:

- Chemical process/storage tanks
- Fluid handling fittings
- · Semiconductor equipment
- Fire-safe components
- DI water systems

Advantages of Kynar:

- High purity
- · Flame resistance
- · Easy to machine
- · Excellent weatherability
- FDA, USDA, USP Class VI, 3A, UL, V-0, FM4910 (Kynar 740)

Manufacturing Capabilities:

- Rod: ¹/₄" to 15" dia.
- Sheet (extruded): .030" to .1875" thick
- Slab (compression molded): 1/4" to 4" thick
- Film: .002" to .029" thick

Colors/Grades:

Natural Beige

In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

Property	Units	Test Standard	Kynar 740	Kynar 2850
Mechanical		'		
Flexural Modulus	psi	ASTM D790	200,000-335,000	150,000-180,000
Flexural Strength	psi	ASTM D790	8,500-11,000	3,000-5,000
Hardness-Shore D	D Scale	ASTM D2240	D76-D80	D70-D75
Izod Impact Strength Notched Un-Notched	ft•lbs/in ft•lbs/in	ASTM D256 ASTM D256	1.8-4 20.0-80.0	2-8 No Break
Tensile Elongation @break @yield	% %	ASTM D638 ASTM D638	20-100 7.0-13.0	200 10.0-20.0
Tensile Modulus	psi	ASTM D638	200,000-335,000	150,000-220,000
Tensile Strength @yield	psi	ASTM D638	6,500-8,000	4,500-6,000
Thermal				
Coefficient of Thermal Expansion	in/in/°F	ASTM D696	6.6x10 ⁻⁵	7.0x10 ⁻³
Continuous Use Temperature	°F	_	280	240
Flammability Rating	_ _ _	UL94 UL2360 FM4910	V-0 Class II Listed	V-0 — Listed
Heat Deflection Temperature @66 psi @264 psi	°F °F	ASTM D648 ASTM D648	257-284 221-239	140-167 100-131
Limiting Oxygen Index	%	ASTM D2868	75	43
Melt Temperature	°F	ASTM D4591	329-342	311-320
Electrical				
Dielectric Constant @1kHz	_	ASTM D150	4.5-9.5	3.5-10.2
Dielectric Strength @5mil	V/mil	ASTM D149	1,600	_
Volume Resistivity	ohm•cm	ASTM D257	2.0x10 ¹⁴	2.0x10 ¹⁴
Other				
Specific Gravity	_	ASTM D792	1.78	1.78
Water Absorption @24 hours	%	ASTM D570	0.03	0.04
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