

PVDF (polyvinylidene fluoride)

KYNAR® / SUSTA® PVDF / TECAFLON™



PVDF, often referred to by its trade name Kynar®, is a high purity engineering thermoplastic with excellent chemical resistance, abrasion resistance, flame resistance, and UV stability. PVDF is widely used for chemical tank liners and semiconductor equipment components.

Homopolymer PVDF has higher strength and stiffness and has a higher heat deflection temperature than copolymer PVDF. Copolymer PVDF is less stiff but has superior impact resistance and stress crack resistance.



KEY CHARACTERISTICS:

- Excellent chemical resistance
- High purity
- Easy to weld using thermoplastic welding equipment
- Good UV stability
- Flame resistant
- Abrasion resistant
- FDA compliant grades available

APPLICATIONS:

- Chemical tank liners
- Pump and valve parts
- Semiconductor equipment components

PVDF TYPICAL PROPERTIES:

	UNITS	ASTM TEST	PVDF HOMOPOLYMER
Tensile strength	psi	D-638	7,800
Flexural modulus	psi	D-790	310,000
Izod impact (notched)	ft-lbs/in of notch	D-256	3.0
Heat deflection temperature @264 psi	°F	D-648	235
Maximum continuous service temperature in air	°F		-
Water absorption (immersion 24 hours)	%	D-570	0.02
Coefficient of linear thermal expansion	in/in/°F x 10 ⁻⁵	D-696	7.1

Standard Sizes: SHEET: 24"x48" (0.25"-4.0" thick), 48"x96" (0.125"-2.0" thick) ROD: diameter 0.375"-6.0"

Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less. Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years



NATIONWIDE
1.888.CURBELL
www.curbellplastics.com

©2008 Curbell Plastics, Inc. All other trademarks and service marks are property of the respective manufacturers. All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Curbell, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of specific products in any given application. PVDFDataSheet 0308