Ensinger TECAFLON® PVDF

Polyvinylidene Fluoride

Ensinger Inc.

Message:

Polyvinylidene fluoride, or PVDF, is a fluorinated thermoplastic resin which has outstanding resistance to most mineral and organic acids, aliphatic and aromatic hydrocarbons, alcohols, halogenated solvents, and oxidizing environments. It also has outstanding aging resistance, with its properties remaining constant after many years.
TECAFLON® PVDF's excellent chemical and physical properties and the ease with which it can be processed make it especially suitable for components in the chemical, petrochemical, hydrometallurgical, pharmaceutical, food, nuclear, and paper and pulp industries, as well as the semiconductor processing industry.

General Information			
Features	Anti-gamma radiation		
	Solvent resistance		
	Good UV resistance		
	Good chemical resistance		
	Alcohol resistance		
	acid resistance		
	Hydrocarbon resistance		
	Compliance of Food Exposure		
	Non-toxic		
	Flame retardancy		
Uses	Non-specific food applications		
	Nuclear energy applications		
	Drug		
Agency Ratings	FDA not rated		
Forms	Shapes		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.78	g/cm³	ASTM D792
Water Absorption (23°C, 24 hr)	0.020	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	100		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2410	MPa	ASTM D638
Tensile Strength (Break, 23°C)	53.8	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	35	%	ASTM D638
Flexural Modulus (23°C)	2140	MPa	ASTM D790
Flexural Strength (23°C)	74.1	MPa	ASTM D790
Compressive Strength (23°C)	80.0	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**

Notched Izod Impact (23°C)	160	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	149	°C	ASTM D648
1.8 MPa, not annealed	113	°C	ASTM D648
Peak Melting Temperature	172	°C	ASTM D3418
CLTE - Flow	1.3E-4	cm/cm/°C	ASTM D696
Thermal Conductivity	0.19	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity (23°C)	5.0E+14	ohms·cm	ASTM D257
Dielectric Strength	11	kV/mm	ASTM D149
Dielectric Constant [1] (23°C, 60 Hz)	9.00		ASTM D150
Dissipation Factor (23°C, 60 Hz)	0.060		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-0		UL 94
Additional Information			
Data obtained from extruded shapes material.			
NOTE			
1.	50% RH		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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