

PVDF stands for Polyvinylidene Fluoride. It is a high-performance thermoplastic material known for its excellent chemical resistance, high thermal stability, and exceptional mechanical properties. PVDF is commonly used in applications that require resistance to harsh chemicals, UV radiation, and high temperatures.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic Fluoropolymer
Chemical Name	PVDF Polyvinylidene Fluoride
Additives	Unfilled
Color	Natural White to Off White
UV Resistant	Yes

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.064
Water Absorption, 24 hrs, Immersion,% by wt.	0.03
Coefficient of Linear Thermal Expansion, x10 ⁻⁵ in./in./°F	6.6
Heat Deflection Temp,°F at 263psi	230
Melting Point Temp,°F	332
Max Continuous Operating Temp,°F	300
Minimum Operating Temp,°F	-58
Flammability Rating,UL94	V-0
Dielectric Strength,V/mil	1700
Dielectric Constant at 1 MHz	8.5
Thermal Conductivity,BTU-in/ft ² -hr-°F	1.2

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	6.3
Tensile Modulus,ksi	290
Compressive Strength,ksi	9
Compressive Modulus,ksi	160
Flexural Strength,ksi	9.7
Flexural Modulus,ksi	290
Elongation at Break	50%
Hardness Shore D	75
Notched Izod Impact Strength,ft-lb/in	3

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.