

Goodfellow Polyvinyl Fluoride (PVF) Film

Category : Polymer , Thermoplastic , Fluoropolymer

Material Notes:

A semi-crystalline, colorless, transparent-translucent fluoropolymer with excellent weathering resistance, good chemical resistance and low permeability to gases; it is very slow burning and has a very high tolerance of flexing. It is UV transparent, down to ca. 250 nm for thinner films. It is very expensive and unsuitable for injection molding because its melt decomposition rate is too fast. Normally only available as film which is used for exterior glazing, release film and surface protection such as flammability reduction of aircraft interiors. Information provided by Goodfellow.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Goodfellow-Polyvinyl-Fluoride-PVF-Film.php

Physical Properties	Metric	English	Comments
Density	1.37 - 1.39 g/cc	0.0495 - 0.0502 lb/in ³	
Water Absorption	0.050 %	0.050 %	
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	80	80	
Elongation at Break	90 - 250 %	90 - 250 %	
Tensile Modulus	2.10 - 2.60 GPa	305 - 377 ksi	
Poissons Ratio	0.40	0.40	
Shear Modulus	0.750 - 0.930 GPa	109 - 135 ksi	calculated
Izod Impact, Unnotched	1.80 J/cm	3.37 ft-lb/in	Notch Status Unknown
Tear Strength	130 - 200 kN/m	742 - 1140 pli	

Thermal Properties	Metric	English	Comments
CTE, linear	50.0 - 97.0 $\mu\text{m/m-}^{\circ}\text{C}$	27.8 - 53.9 $\mu\text{in/in-}^{\circ}\text{F}$	
Specific Heat Capacity	1.00 - 1.80 J/g- $^{\circ}\text{C}$	0.239 - 0.430 BTU/lb- $^{\circ}\text{F}$	
Maximum Service Temperature, Air	150 - 200 $^{\circ}\text{C}$	302 - 392 $^{\circ}\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	120 $^{\circ}\text{C}$	248 $^{\circ}\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	80.0 $^{\circ}\text{C}$	176 $^{\circ}\text{F}$	

Minimum Service Temperature, Air Thermal Properties	-70.0 °C Metric	-94.0 °F English	Comments
Flammability, UL94	V-0	V-0	
Oxygen Index	35 %	35 %	

Optical Properties	Metric	English	Comments
Refractive Index	1.46	1.46	
Transmission, Visible	80 %	80 %	transparent/translucent; thickness not quantified

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	
Dielectric Constant	8.0 @Frequency 1000 Hz	8.0 @Frequency 1000 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	
Dissipation Factor	0.04 @Frequency 1000 Hz	0.04 @Frequency 1000 Hz	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China