

## Quadrant EPP Symalit® PVDF (ASTM Product Data Sheet)

Category : Polymer , Thermoplastic , Fluoropolymer , PVDF

Material Notes:

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Quadrant-EPP-Symalit-PVDF-ASTM-Product-Data-Sheet.php](http://www.lookpolymers.com/polymer_Quadrant-EPP-Symalit-PVDF-ASTM-Product-Data-Sheet.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.78 g/cc	1.78 g/cc	ASTM D792
Water Absorption	0.030 %	0.030 %	Immersion, 24hr; ASTM D570(2)
Water Absorption at Saturation	0.050 %	0.050 %	Immersion; ASTM D570(2)

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	75	75	ASTM D785
Hardness, Shore D	78	78	ASTM D2240
Tensile Strength	48.3 MPa	7000 psi	ASTM D638
Elongation at Break	100 %	100 %	ASTM D638
Tensile Modulus	2.07 GPa	300 ksi	ASTM D638
Flexural Strength	55.2 MPa	8000 psi	ASTM D790
Flexural Modulus	2.00 GPa	290 ksi	ASTM D790
Compressive Strength	68.9 MPa	10000 psi	10% Def.; ASTM D695
Compressive Modulus	1.10 GPa	160 ksi	ASTM D695
Izod Impact, Notched	1.60 J/cm	3.00 ft-lb/in	ASTM D256 Type A

Thermal Properties	Metric	English	Comments
CTE, linear	119 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	66.0 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ASTM E831
	@Temperature -40.0 - 149 $^{\circ}\text{C}$	@Temperature -40.0 - 300 $^{\circ}\text{F}$	
Thermal Conductivity	0.216 W/m-K	1.50 BTU-in/hr-ft <sup>2</sup> - $^{\circ}\text{F}$	ASTM F433
Melting Point	171 $^{\circ}\text{C}$	340 $^{\circ}\text{F}$	Crystalline, Peak; ASTM D3418
Maximum Service Temperature, Air	149 $^{\circ}\text{C}$	300 $^{\circ}\text{F}$	Long Term
Deflection Temperature at 1.8 MPa (264 psi)	110 $^{\circ}\text{C}$	230 $^{\circ}\text{F}$	ASTM D648

Flammability 1B, 94 Thermal Properties	V-0 Metric	V-0 English	1/8 inch (Estimated Rating) Comments
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Electrical Properties	Metric	English	Comments
Surface Resistivity per Square	>= 1.00e+13 ohm	>= 1.00e+13 ohm	EOS/ESD S11.11
Dielectric Constant	6.4 @Frequency 1e+6 Hz	6.4 @Frequency 1e+6 Hz	ASTM D150
Dielectric Strength	10.2 kV/mm	260 kV/in	Short Term; ASTM D149
Dissipation Factor	0.165 @Frequency 1e+6 Hz	0.165 @Frequency 1e+6 Hz	ASTM D150

Compliance Properties	Metric	English	Comments
3A-Dairy	Yes	Yes	
Canada AG	No	No	
FDA	Yes	Yes	
NSF	Yes	Yes	
USDA	Yes	Yes	
USP Class VI	Yes	Yes	

Chemical Resistance Properties	Metric	English	Comments
Acids, Strong (pH 1-3)	Acceptable	Acceptable	
Acids, Weak	Acceptable	Acceptable	
Alcohols	Acceptable	Acceptable	
Alkalies, Strong (pH 11-14)	Unacceptable	Unacceptable	
Alkalies, Weak	Limited	Limited	
Chlorinated Solvents	Limited	Limited	
Conductive / Static Dissipative	No	No	
Continuous Sunlight	Limited	Limited	
Hot Water / Steam	Acceptable	Acceptable	
Hydrocarbons - Aliphatic	Acceptable	Acceptable	
Hydrocarbons - Aromatic	Acceptable	Acceptable	

<small>Inorganic Salt Solutions</small> Chemical Resistance Properties	Acceptable Metric	Acceptable English	Comments
Ketones, Esters	Unacceptable	Unacceptable	

Descriptive Properties	Value	Comments
Color	Natural	
Machinability	3	1-10, 1=Easier to Machine

## Contact Songhan Plastic Technology Co.,Ltd.

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