

Solvay Specialty Polymers Solef® 1006 Polyvinylidene Fluoride (PVDF)

Category : Polymer , Thermoplastic , Fluoropolymer , PVDF , Polyvinylidene fluoride (PVDF), Molded/Extruded

Material Notes:

Solef® 1006 PVDF is a very low viscosity homopolymer resin mainly used in injection molding or in multifilament extrusion. Features: Homopolymer; Low Viscosity Uses: General Purpose Additional Properties: Charpy Notched Impact Strength - ASTM D6110 (23°C, 4.00 mm): 25.0 to 75.0 J/m; Coefficient of Friction - ASTM D1894 0.150 to 0.350; Coefficient of Friction - ASTM D1894 0.200 to 0.400; Crystallization Heat - ASTM D3417 54.0 to 60.0 J/g; Crystallization Point - ASTM D3418 137 to 144 °C; Heat of Fusion - ASTM D3417 58.0 to 67.0 J/g; Mold Shrinkage - 2.0 to 3.0 % Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Solef-1006-Polyvinylidene-Fluoride-PVDF.php

Physical Properties	Metric	English	Comments
Density	1.75 - 1.80 g/cc	0.0632 - 0.0650 lb/in ³	ASTM D792
Water Absorption	<= 0.040 % @Time 86400 sec	<= 0.040 % @Time 24.0 hour	ISO 62
Melt Flow	30 - 40 g/10 min @Load 2.16 kg, Temperature 230 °C	30 - 40 g/10 min @Load 4.76 lb, Temperature 446 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	73 - 80	73 - 80	1 sec, 2.00 mm; ISO 868
Tensile Strength at Break	30.0 - 50.0 MPa @Thickness 2.00 mm	4350 - 7250 psi @Thickness 0.0787 in	50 mm/min; ASTM D638
Tensile Strength, Yield	50.0 - 60.0 MPa @Thickness 2.00 mm	7250 - 8700 psi @Thickness 0.0787 in	50 mm/min; ASTM D638
Elongation at Break	20 - 300 %	20 - 300 %	50 mm/min; ASTM D638
Elongation at Yield	5.0 - 10 %	5.0 - 10 %	50 mm/min; ASTM D638
Tensile Modulus	1.80 - 2.60 GPa @Thickness 2.00 mm	261 - 377 ksi @Thickness 0.0787 in	1.0 mm/min; ASTM D638
Taber Abrasion, mg/1000 Cycles	5.0 - 10	5.0 - 10	CS-10 Wheel, 1000 g; ASTM D1044

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	140 Âµm/m-Â°C @Temperature 0.000 -	77.8 Âµin/in-Â°F @Temperature 32.0 -	1

Thermal Properties	40.0 Â°C Metric	104 Â°F English	Comments
Specific Heat Capacity	1.20 J/g-Â°C	0.287 BTU/lb-Â°F	ASTM C351
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
	1.60 J/g-Â°C	0.382 BTU/lb-Â°F	ASTM C351
	@Temperature 100 Â°C	@Temperature 212 Â°F	
Thermal Conductivity	0.200 W/m-K	1.39 BTU-in/hr-ftÂ²-Â°F	ASTM C177
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Melting Point	170 - 175 Â°C	338 - 347 Â°F	DSC
Crystallization Temperature	134 - 144 Â°C	273 - 291 Â°F	Peak; ASTM D3418
Vicat Softening Point	135 - 145 Â°C	275 - 293 Â°F	Rate A (50Â°C/h), Loading 2 (50 N)
Glass Transition Temp, Tg	-40.0 Â°C	-40.0 Â°F	ASTM E1356
Flammability, UL94	V-0	V-0	
	@Thickness 0.100 mm	@Thickness 0.00394 in	
Oxygen Index	44 %	44 %	ASTM D2863
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	ASTM D257
Surface Resistance	>= 1.00e+14 ohm	>= 1.00e+14 ohm	ASTM D257
Dielectric Constant	7.0 - 10	7.0 - 10	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	20.0 - 25.0 kV/mm	508 - 635 kV/in	ASTM D149
	@Thickness 1.00 mm	@Thickness 0.0394 in	

Descriptive Properties	Value	Comments
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	

Descriptive Properties	Value	Comments
Form	Pellets	
Processing Technique	Extrusion; Injection Molding	

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