Solef® 31508

Polyvinylidene Fluoride

Solvay Specialty Polymers

Message:

Solef® 31508 PVDF copolymer is a low viscosity and very flexible grade for Wire&Cable applications.

General Information			
Features	Copolymer Good Flexibility Low Viscosity		
Uses	Wire & Cable Applications		
Forms	Granules		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.75 to 1.80	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.0 to 8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0 to 3.0	%	
Water Absorption (23°C, 24 hr)	< 0.040	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 2.00 mm)	53		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [1] (23°C, 2.00 mm)	400 to 600	MPa	ASTM D638
Tensile Strength [2]			ASTM D638
Yield, 23°C, 2.00 mm	14.0 to 35.0	MPa	
Break, 23°C, 2.00 mm	14.0 to 30.0	MPa	
Tensile Elongation [3]			ASTM D638
Yield, 23°C, 2.00 mm	10 to 12	%	
Break, 23°C, 2.00 mm	350 to 600	%	
Coefficient of Friction			ASTM D1894
vs. Itself - Dynamic	0.20 to 0.30		
vs. Itself - Static	0.20 to 0.40		
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-10 Wheel)	5.00 to 10.0	mg	ASTM D4060
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact [4] (23°C, 4.00 mm)	1000	J/m	ASTM D6110
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-28.0	°C	ASTM D4065
Vicat Softening Temperature	110	°C	ASTM D1525 [5]
Melting Temperature	167 to 171	°C	ASTM D3418
Peak Crystallization Temperature (DSC)	125 to 131	°C	ASTM D3418

CLTE - Flow (0 to 40°C)	1.3E-4 to 1.5E-4	cm/cm/°C	ASTM D696
Specific Heat			ASTM E968
23°C	1200	J/kg/°C	
100°C	1600	J/kg/°C	
Thermal Conductivity (23°C)	0.20	W/m/K	ASTM C177
Crystallization Heat	22.0 to 28.0	J/g	ASTM D3417
Heat of Fusion	23.0 to 29.0	J/g	ASTM D3417
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+14	ohms	ASTM D257
Volume Resistivity	> 1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (23°C, 1.00 mm)	20 to 25	kV/mm	ASTM D149
Dielectric Constant (23°C, 1 kHz)	7.00		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.100 mm)	V-0		UL 94
Oxygen Index (3.00 mm)	48	%	ASTM D2863
NOTE			
1.	Type IV, 1.0 mm/min		
2.	Type IV, 50 mm/min		
3.	Type IV, 50 mm/min		
4.	2 m/s, Partial Break		
5.	Rate A (50°C/h), Loading 2 (50 N)		

Recommended distributors for this material

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