

Solef® 60512

Polyvinylidene Fluoride
Solvay Specialty Polymers

Message:

Solef® 60512 PVDF copolymer has high viscosity of the melt and it is a grade for offshore piping.

General Information			
Features	Copolymer		
	High Viscosity		
Uses	Piping		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.75 to 1.80	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/10.0 kg)	2.5 to 4.0	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)	70		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ¹ (23°C, 2.00 mm)	1250 to 1400	MPa	ASTM D638
Tensile Strength ²			ASTM D638
Yield, 23°C, 2.00 mm	34.0 to 40.0	MPa	
Break, 23°C, 2.00 mm	34.0 to 40.0	MPa	
Tensile Elongation ³			ASTM D638
Yield, 23°C, 2.00 mm	9.0 to 12	%	
Break, 23°C, 2.00 mm	100 to 300	%	
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	-40.0	°C	ASTM D4065
Vicat Softening Temperature	167	°C	ASTM D1525 ⁵
Melting Temperature	170 to 174	°C	ASTM D3418
Peak Crystallization Temperature (DSC)	142 to 146	°C	ASTM D3418
CLTE - Flow (0 to 40°C)	1.3E-4 to 1.8E-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	42.0 to 50.0	J/g	ASTM D3417
Heat of Fusion	41.0 to 50.0	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
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)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

