Solef® 6020
polyvinylidene fluoride

Solef® 6020 PVDF homopolymer has very high viscosity for membranes and lithium batteries. It is available exclusively as powder.

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Homopolymer	• Ultra High Viscosity
Uses	• Batteries	• Membranes
Forms	• Powder	

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.75 to 1.80		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/21.6 kg)	< 2.0	g/10 min	ASTM D1238
Water Absorption (24 hr, 23°C)	< 0.040	%	ASTM D570

Mechanical	Typical Value	Unit	Test method
Tensile Modulus [1] (23°C, 2.00 mm)	1600 to 1700	MPa	ASTM D638
Tensile Strength [2]			ASTM D638
Yield, 23°C, 2.00 mm	53.0 to 57.0	MPa	
Break, 23°C, 2.00 mm	25.0 to 50.0	MPa	
Tensile Elongation [2]			ASTM D638
Yield, 23°C, 2.00 mm	5.0 to 10	%	
Break, 23°C, 2.00 mm	15 to 50	%	

Thermal	Typical Value	Unit	Test method
Glass Transition Temperature	-40.0	°C	ASTM D4065
Melting Temperature	171 to 175	°C	ASTM D3418
Peak Crystallization Temperature (DSC)	133 to 138	°C	ASTM D3418
Crystallization Heat	47.0 to 52.0	J/g	ASTM D3417
Heat of Fusion	57.0 to 66.0	J/g	ASTM D3417

Electrical	Typical Value	Unit	Test method
Surface Resistivity	> 1.0E+14	ohms	ASTM D257
Volume Resistivity	> 1.0E+14	ohms·cm	ASTM D257

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Notes
Typical properties: these are not to be construed as specifications.

[1] Type IV, 1.0 mm/min

[2] Type IV, 50 mm/min

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