Solef® FPCH10/0001

polyvinylidene fluoride

Solef FPCH10/0001 is a medium-viscosity PVDF resin typically processed by extrusion.

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Homopolymer	• Medium Viscosity
Processing Method	• Extrusion	

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.75 to 1.80		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	4.0 to 8.0	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)	1700 to 2500	MPa	ASTM D638
Tensile Strength [2]			ASTM D638
Yield, 23°C, 2.00 mm	50.0 to 60.0	MPa	
Break, 23°C, 2.00 mm	30.0 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	20 to 300	%	

Thermal	Typical Value	Unit	Test method
Peak Melting Temperature	170 to 175	°C	ASTM D3418
Peak Crystallization Temperature (DSC)	137 to 144	°C	ASTM D3418

Electrical	Typical 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 to 10.0		ASTM D150

Flammability	Typical Value	Unit	Test method
Flame Rating (0.100 mm)	V-0		UL 94
Oxygen Index (3.00 mm)	44	%	ASTM D2863

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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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