M-Cor FEP is a copolymer of tetrafluoroethylene (TFE) and hexafluoropropylene (HFP). M-Cor FEP has a lower melt viscosity than PTFE and can be processed like other thermoplastic resins by the melt flow processes of extrusion, transfer, injection and compression molding. Because the bonding energy between its carbon and fluorine atoms is so high, and the molecule is completely filled with fluorine atoms, M-Cor FEP fluorocarbon polymer has excellent thermal, electrical, and chemical stability.

M-Cor FEP offers superior reliability and retention of its properties in a wide thermal range from cryogenic to high temperature (-200°C to +200°C).
M-Cor FEP maintains its physical properties in extreme environments. It provides excellent chemical and permeation resistance including exposure to weathering, light, and moisture.
A low dielectric constant and dissipation factor exist along with high dielectric strength over a wide range of frequencies and temperatures.
M-Cor FEP offers the lowest critical surface energy of any plastic material in addition to excellent water and oil repellency for non-stick and mold release applications.
High Transparency: Products prepared from M-Cor FEP are transparent with good transmittance of both ultraviolet and visible wavelengths; the lowest refractive index of any plastic and characterized by very low light reflection.

Information provided by M-Cor

Physical Properties	Metric	English	Comments
Specific Gravity	2.12 - 2.17 g/cc	2.12 - 2.17 g/cc	ASTM D2116
Bulk Density	1.20 g/cc	0.0434 lb/in³	
Melt Flow	2.0 - 3.6 g/10 min	2.0 - 3.6 g/10 min	ASTM D2116

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	19.6 - 34.3 MPa	2840 - 4970 psi	ASTM D2116
Elongation at Break	>= 400 %	>= 400 %	ASTM D2116

Compressive Yield Strength	5.00 - 6.00 MPa	725 - 870 psi	1% Deformation; ASTM D695
Flex Crack Resistance	200000	200000	Cycles per MIT Flex; ASTM D2176

Electrical Properties	Metric	English	Comments
Volume Resistivity	<= 1.00e+18 ohm-cm	<= 1.00e+18 ohm-cm	ASTM D257
Dielectric Constant 	2.1 @Frequency 1000 Hz	2.1 @Frequency 1000 Hz	ASTM D150
	2.1 @Frequency 1e+6 Hz	2.1 @Frequency 1e+6 Hz	ASTM D150
Dielectric Strength	19.7 - 23.6 kV/mm @Thickness 3.17 mm	500 - 600 kV/in @Thickness 0.125 in	Short Time; ASTM D149
Dissipation Factor	0.000060 @Frequency 1000 Hz	0.000060 @Frequency 1000 Hz	ASTM D150
	0.00050 @Frequency 1e+6 Hz	0.00050 @Frequency 1e+6 Hz	ASTM D150

Thermal Properties	Metric	English	Comments
Melting Point	250 - 260 °C	482 - 500 °F	
Maximum Service Temperature, Air	200 °C	392 °F	
Minimum Service Temperature, Air	-200 °C	-328 °F	
Oxygen Index	>= 95 %	>= 95 %	ASTM D2863