

## FEP Resin for Wires & Cables

### Description

Perfluorinated ethylene-propylene (FEP) for wire and cable is the copolymer of tetrafluoroethylene (TFE) and hexafluoropropylene (HFP) with excellent thermo-stability, outstanding chemical inertness, low friction coefficient, distinctive air aging resistance, vapor penetrating resistance, non-inflammability and superior electrical insulation. It is nearly stabilized in rather wide ranges of temperature and frequency. And it can be widely used as wire and cable in the field of aircraft, spacecraft, communication, computer electricity instrument, high buildings and high temperature up to 200° C for a long time, etc, due to its excellent interruption & shielding resistance to communication signals. The thermoplastic process techniques can be used to fabricate useful products from FEP.

### Specification

Grade	FM-1	FW-1	FW-2	FW-3	FW-4	FW-5
Appearance	Clean Semitransparent Granules					
Melt Flow Rate, g/10min	0.8-2.0	2.1-4.0	4.1-8.0	8.1-12.0	12.1-20.0	20.1-27.0
Tensile Strength, MPa ≥	27	25	21	20	18	18
Elongation, %	320	300	300	300	280	280
Melting Point, °C	260±5	265±10	265±10	265±10	255±10	255±10
S.S.G	2.12-2.17					
Volatile, % ≤	0.10					
Thermo-stress cracking resistance	Excellent	Good	Good	Fair		
Volume Resistance, Ω.cm	1X10 <sup>16</sup>					
Breakdown Voltage, kV/mm	20-24					
Dielectric Constant, 10 <sup>6</sup> Hz ≤	2.15	2.10				
Dielectric Loss Tangent, 10 <sup>6</sup> Hz ≤	7.0X10 <sup>-4</sup>	3.0X10 <sup>-4</sup>			4.0X10 <sup>-4</sup>	
Applications	Wires and cables requiring resistance to stress cracking	Thick wall wires and cables	General purpose wires and cables	Thin wall wires	Wires by high-speed extrusion	Thin wall wires by high-speed extrusion

### Package

Packed in a double layer PE bag, and then packed in a cardboard drum. N.W. 20kgs each drum.

### Transportation & Storage

It should be stored in a clean, cool and dry warehouse. Avoid contamination by dust and moisture. It's transported as non-hazardous goods.

### Precaution

The processing temperature mustn't be over 400°C to avoid toxic analyzed gases that may produce.