



**FEP Extrusion Grade**

FEP is the copolymer of tetrafluoroethylene (TFE) and hexafluoropropylene (HFP). It has excellent thermo-stability, outstanding chemical inertness, low friction coefficient, distinctive air aging resistance, vapor penetrating resistance, non-inflammability and superior electrical insulation.

FEP extrusion grade is mainly used in extruding insulation layers and jackets for conducting wire and cable. It's also widely used in the production of pipe, tube, film and etc.

Items	FEP Extrusion Grade						
	FT-1	FT-2	FT-3	FT-401	FT-402	FT-501	FT-502
Appearance	Clean semi-transparent pellet						
Melt flow rate (g/10min)	2.1-4.0	4.1-8.0	8.1-12.0	12.1-16.0	16.1-20.0	20.1-24.0	24.1-35.0
Tensile strength (MPa) ≥	25	21	21	20	20	18	16
Elongation at Break (%) ≥	300	300	300	300	300	280	250
Melting point (°C)	265±10	265±10	265±10	265±10	265±10	265±10	265±10
S.S.G	2.12-2.17						
Volatile (%) ≤	0.10						
Thermo-stress craze resistance	Very good	Very good	good	good	good	good	good
Dielectric loss tangent (10 <sup>6</sup> HZ)	3.0×10 <sup>-4</sup>			4.0×10 <sup>-4</sup>			
Application	Thick wire jacket, valve etc.		Wire and cable for general purpose, pipe, tube etc.			High Speed Extrusion. Thin wire and cable, tube etc.	

**Package, storage and transportation**

FEP resin is sealed in plastic bag with 25kg net weight per bag, and then packed in drum or big cardboard box. It should be stored in clean and dry warehouses to avoid pollution from impurities. The processing temperature should be below 400°C to avoid releasing toxic gases.



**FEP Molding (Lining) Grade**

FEP is the copolymer of tetrafluoroethylene (TFE) and hexafluoropropylene (HFP). FEP molding grade FT-M has excellent thermo-stability and chemical inertness, outstanding electrical insulation and very low friction coefficient. The thermoplastic process techniques can be used to fabricate useful products from FEP.

Items	FEP Molding (Lining) Grade
	FT-M
Appearance	Semitransparent pellet
Melt flow rate (g/10min)	0.8~2.0
Tensile strength (Mpa)≥	28
Elongation at break (%) ≥	320
Melting point(°C)	265±10
S.S.G	2.12~2.17
Volatile(%) ≤	0.1
Process techniques	Extrusion, compress molding, transmission molding
Application	Excellent thermo-stress craze resistance, used as anti-corrosive valve, gasket and various molding products.

**Package, storage and transportation**

FEP resin is sealed in plastic bag with 25kg net weight per bag, and then packed in drum or big cardboard box. It should be stored in clean and dry warehouses to avoid pollution from impurities. The processing temperature should be below 400 °C to avoid releasing toxic gases.



### FEP Dispersion

FEP Dispersion can be applied to process glass fibers fabric by dipping and roasting, corrosive and adhesive resistance coatings by spraying and continuity film of non-pinhole by molding. And it' also used for metal non-stick coating.

Items	FT-D-1	FT-D-2
Appearance	Milky or yellowish even dispersion	
Solid content (% wt)	50±2	50±2
Surfactant concentration (% wt)	5~7	5~7
PH Value	8~10	8~10
Melt Flow Rate(g/10min)	2.0~5.0	5.1~8.0

#### Packing, storage & transportation

It is packed in plastic drums with net weight of 25kg per drum. The environmental temperature for transportation and storage ranges from 5°C to 30°C, and it should be kept from coldness and sunshine directly, available for 3 months. The container should be shocked slightly every month or the stored should be agitated above twice so as to avoid any possible precipitation. The processing temperature should be below 400°C to avoid releasing toxic gases.



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**FEP Coating Powder FT-M1**

FEP coating powder FT-M1 has extraordinary properties, such as high apparent density, excellent fluidity, and thermal stability and leveling property. It can be coated on the surface of a variety of metals the thickness of 0.1~ 0.15mm for each coating layer. The product also has good re-coating ability. It is always used as antistick and anticorrosive coating.

**1. Brief details:**

Appearance	Characteristics	Processing method	Applicable thickness
White powder	High-purity, clear	Electrostatic coating	100~300μm

**2. Characteristic of powder:**

Properties	Unit	Specification
Melt flow index(MFI)	g/10min	0.8~27
Melting point	°C	265-275
Density	g/cm <sup>3</sup>	0.5~0.9

**3. Coating process:**

Degreasing (Remove stains such as oil and grease on the surface of the base material)

→ Surface Roughening(Sandblast)

→ Applying primer(Primer layer : 80~90°C×10 min or more)

→ Applying FEP powder for electrostatic coating(Recoating)

→ Sintering(sintered temperature range 320~350°C.)

→ Cooling(Water, air, and furnace cooling are applicable.)

\* Recoating : 50~100μm per each coating.

\* Midterm Burning 340~350°C ×15~30min; Final Burning 320~340°C ×1~3h.