Pureflon™ FEP FC-20 MED

Technical Data

Pureflon™ FEP FC-20 MED is a melt-processable fluoropolymer resin specifically designed for extrusion applications such as tubing. It has excellent thermo-stability, low coefficient of friction, outstanding chemical inertness, and superior electrical insulation properties. This grade meets USP Class VI requirements for medical applications. Upon request, letters regarding USP Class VI compliance can be provided.

Packing: Comes in 25 kg bags

Typical properties of Pureflon™ FEP FC-20 MED

Properties	Test Method	Units	Typical Value
Melt Flow Index(372°C/5 kg)	ASTM D1238	g/10min	5.1~8.0
Melting point	ASTM D4591	°C (°F)	265 (509)
Specific Gravity (SSG)	ASTM D792	g/cm^3	2.12~2.17
Tensile strength	ASTM D638	MPa ≥	24
Elongation at break	ASTM D638	% ≥	300
Dielectric constant	ASTM D150	10^6HZ	2.10
Dielectric loss tangent	ASTM D150	10^6HZ	3.0×10^{-4}

Product description

Pureflon™ FEP FC-20 MED is a copolymer of tetrafluorothylene(TFE) and hexafluoropropylene (HFP) and is supplied in pellet form and designed for extrusion applications such as tubing, wire coating, and monofilament extrusion.

Like all Pureflon™ FEP products, FC-20 MED offers an excellent combination of properties:

- Excellent Thermo-Stability
- Low Friction Coefficient
- Outstanding Chemical Inertness
- Distinctive Air Aging Resistance
- Non-Inflammability
- Vapor Penetrating Resistance
- Superior Electrical Insulation

Processing Guidelines for Extrusion

Pureflon™ FC-20 MED is fabricated using the same melt processing techniques as other thermoplastics. However, molten fluoropolymer resins are corrosive to many metals; therefore, special corrosion-resistant materials must be used for all parts of extrusion equipment that come into contact with the melt. Corrosion is likely to occur if dead spots exist in the equipment, processing temperatures are too high, or hold-up time is too long. In addition, resin degradation will accelerate corrosion. Corrosion resistant alloy metals, such as Hastelloy®, are the materials of choice for material contact. Hardened nickel plate can be used, but even small holes, chips, or cracks in the plating can compromise its performance. Chrome-plated materials are not recommended.

Storage and handling

FEP pellets attract dust and moisture from ambient conditions and should be stored in a clean dry place. Recommended storage temperature range is 15-20°C. Because FEP is a hydrophobic polymer it does not generally require drying before processing unless high humidity conditions create surface moisture adsorption.

General handling/processing precautions include:

(1) Do not smoke in areas contaminated with powder/residue from this product;

(2) Process only in well-ventilated areas;

(3) After handling this product, wash any Contacted skin with soap and water;

(4) Avoid eye contact.