Pureflon™

Pureflon™ FEP FC-20

Technical Data

Pureflon™ FEP FC-20 is a melt-processable fluoropolymer resin specifically designed for low-speed extrusion of thick wire or cable jacket, valve etc.

It has excellent thermo-stability, low friction coefficient, outstanding chemical inertness, distinctive air aging resistance, non-inflammability, vapor penetrating resistance and superior electrical insulation properties.

Product overview: Pureflon™ FEP FC-20 is suited for extrusion proessing. It can be used for low-speed extrusion of thick wire or cable jacket, valve etc.

Typical properties: outstanding chemical inertness
insulate Electronic
non-inflammability
low friction coefficient
excellent thermo-stability

Packing: 25 kg net weights per drum, or paper box.

Typical properties of Pureflon™ FEP FC-20

Properties	Test Method	Units	FC-20
			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 is the copolymer of tetrafluorothylene(TFE) and hexafluoropropylene (HFP). Pureflon™ FEP is supplied in pellet form and designed for low-speed extrusion of thick wire or cable jacket, valve etc.

Like all Pureflon™ resins, Pureflon™ FEP 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 Wire and Cable Use (Extrusion Equipment)

Pureflon™ FEP is fabricated using the same melt processing technique as other thermoplastics. 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. Nickel-based alloys such as Hastelloya, Inconelb, Monelb, and Xaloyc are the materials of choice. Hard-ened 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 ambience and should be stored in a clean dry place. Recommended storage temperature range is 15-20°C. It is hydrophobic, and generally do not 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.

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