

Everflon® Virgin Granular FEP

High performance fluoroplastic material with outstanding processability and superior electrical properties

EVERFLON® FEP

Everflon® FEP (fluorinated ethylene propylene) is a melt processable copolymer of tetrafluoroethylene and hexafluoropropylene. These melt processable resins are ideal for wire coating, tubing, films, and for molding a wide variety of components. Everflon® FEP grades have a service temperature of 200°C. Four different melt flow ranges are available.

BENEFITS

- Exceptional dielectric properties
- Performance at temperature extremes
- Low flammability
- Chemically inert
- Low coefficient of friction
- Weatherability

PROCESSING

Everflon® FEP can be processed by conventional melt extrusion techniques and injection, compression, transfer, and blow molding processes. Extrusion and molding equipment used for Everflon® FEP should be constructed of nickel alloy corrosion resistant materials and be capable of operating at temperatures up to 400°C (750°F).

STORAGE AND HANDLING

Everflon® FEP resins are not affected by storage time.

TECHNICAL SUPPORT

Everflon® product and technical support will be provided by Fluoropolymer Resources from our US facility.

GRADES

Everflon® E4603 (MFR 2-4) is a high molecular weight grade with a lower melt flow rate ideal for applications such as tubing, valve linings and components for the chemical processing industry.

Everflon® E4610 (MFR 6-10) is a general purpose grade that is used in a wide variety of applications. It is often utilized for extruded wire insulation and cable jacketing.

Everflon® T4608 (MFR 4-8) is a higher molecular weight grade which can be used when improved stress crack resistance is needed. Its higher melt strength also makes it well suited for tubing applications.

Everflon® E4622 (MFR 20-24) is a "high productivity" grade designed for the extrusion of thin walled, small diameter wire insulation. It can also be used for injection molding of intricate, thin walled parts. Its low viscosity and higher critical shear rate allow it to be processed at higher extrusion line speeds.

Everflon® E4630 (MFR 27-30) has been specifically designed for high speed extrusion of twisted pair wire insulation for data communication cables. Its low viscosity, enhanced dissipation factor, and significant plate-out resistance make this grade an ideal choice for this application. It is also useful for small gauge wire insulation.



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Typical Property Data for Everflon® FEP Fluoroplastic Resin

Property	Unit	ASTM	Value
THERMAL			
Melting Point	°C	D4591	260
Maximum Service Temperature	°C	na	200
Decomposition Temperature	°C	AIR	450
Coefficient of Thermal Expansion, Linear 20° (µm/m-°C)	µm/m-°C	D696	83-112
PHYSICAL			
Density	g/cm3	D792	2.15
Water Absorption	%	D570	< 0.01
Oxygen Index	%	D2863	> 95
MECHANICAL			
Tensile Strength	Mpa	D368	22
Elongation	%	D368	> 300
Hardness Shore D	-	D2240	67
Ultimate Tensile Strength	Mpa	D638	35-45
Elongation at Break	%	D638	300-400
Flexural Modulus	GPA	D790	925
Coefficient of Friction	-	D1894	0.04-0.06
ELECTRICAL			
Volume Resistivity	Ω-cm	D257	< 1*10 ¹⁸
Dielectric Constant @ 1Mhz	-	D150	2
Dielectric Strength	V/mil	D149	500-2023

PERFORMANCE

Everflon® FEP has been formulated to assure the utmost performance and heat stability in your demanding applications. Rigorous testing has shown the products to be on par with the highest performing FEP resins in the industry.

DATA SHEET

For specific grade information and applications, download our product data sheet from our website: frlusa.com



EVERFLON POLYMER CO.

Everflon Polymer Co., Ltd, part of the C&F group, is the foremost manufacturer of high performance fluoropolymer products in China. Always on the forefront of technology development, Everflon's mission is to produce the finest and most consistent quality of fluoropolymers in the world.



Fluoropolymer Resources, a division of Prime Materials Recovery, is the leading recycler of FEP, PFA and ETFE fluoropolymer plastics in North America, with products sold across the globe.

If you are looking for reliable fluoropolymers that perform under the most demanding applications, or need to extract unrealized value from your scrap materials, contact FRL today to speak with one of our experienced professionals about your specific needs.

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