

# ETFE C4010

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**Everflon+™ Fluoropolymers Compound**

Middle MFR static dissipative resin

## DESCRIPTION

Everflon+™ ETFE C4010 fluoroplastic resin combines the chemical and high-temperature resistance of Everflon™ with antistatic levels of electrical conductivity.

Everflon+™ ETFE C4010 and the other Everflon™ fluoroplastics are melt processible, modified copolymers of ethylene and tetrafluoroethylene. They are high-performance resins that can be processed at relatively high flow rates compared to Everflon+™ ETFE C4003 fluoroplastic resins. They are mechanically tough and offer an excellent balance of properties.



Everflon+™ ETFE C4010 can perform successfully in applications where other thermoplastics are lacking in mechanical toughness, broad thermal capability, ability to meet difficult environmental conditions, or limited by fabricating problems.

Properly processed products made from virgin Everflon+™ ETFEC4010 are inert to most solvents and chemicals, hydrolytically stable, and weather-resistant. The recommended upper service temperature is 17 °C; useful properties are retained at cryogenic ranges. Mechanical properties include outstanding impact strength, cut-through, and abrasion resistance.

# DATA LIST

## Tentative Typical Property Data for Everflon™ PFA C-4010 Fluoropolymer Resin

Property	Test Method		Unit	Typical Value
<b>GENERAL</b>				
Melt Flow Rate /5.0 kg weight	ISO 12086	ASTM D3159	g/10 min	6~10
Melting Point	—	ASTM D3159	°C	260
Specific Gravity	—	D792	—	1.7
Upper Service Temperature	—	—	°C	175
<b>MECHANICAL</b>				
Tensile Strength	ISO 12086	ASTM D3159	MPa (psi)	36 (5200)
Elongation	ISO 12086	ASTM D3159	%	300
<b>ELECTRICAL</b>				
Volume Resistivity	ISO 3915	ASTM D257	ohm-cm	---
<b>OTHER</b>				
Weather and Chemical Resistance	—	—	—	Excellent

Note: For more information of ETFE properties, please visit [www.everflon.com](http://www.everflon.com) or ETFE Tech-Handbook.

Typical properties are not suitable for specification purposes.

## TYPICAL APPLICATIONS

Everflon+™ ETFE C-4010 resin can be used to manufacture extruded tubing, pipe, and other profiles for hose; linings of components used in the chemical processing industries; industrial film; and injection- and blow-molded articles requiring superior electrical, chemical, and thermal properties and stress crack resistance.

## PROCESSING

Everflon+™ ETFE C-4010 can be processed by conventional thermoplastic techniques, such as by melt-extrusion or injection, compression, transfer, and blow-molding processes.

Drying at 100–130 °C (212–266 °F) in a dehumidified oven for 4 hr is suggested to remove any absorbed moisture.

Reciprocating screw injection molding machines are preferred. Corrosion-resistant metals should be used in contact with molten resin from 300–345 °C (570–650 °F).

## **PRECAUTION**

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Before using Everflon+™ ETFE C-4010 resin, refer to the Safety Data Sheet and the latest edition of "The Guide to the Safe Handling of Fluoropolymer Resins"

Open and use containers only in well-ventilated areas using local exhaust ventilation (LEV). Vapors and fumes liberated during hot processing of Everflon+™ ETFE C-4010 should be exhausted completely from the work area. Contamination of tobacco with these polymers must be avoided. Vapors and fumes liberated during hot processing that are not properly exhausted, or from smoking tobacco or cigarettes contaminated with Everflon+™ ETFE C-4010, may cause flu-like symptoms, such as chills, fever, and sore throat. This may not occur until several hours after exposure and will typically pass within about 24 hours. Mixtures with some finely divided metals, such as magnesium or aluminum, can be flammable or explosive under some conditions.

## **HANDLING & PACKAGE**

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The properties of Everflon+™ ETFE C-4010 resins are not affected by storage time. Ambient storage conditions should be designed to avoid airborne contamination and water condensation on the resin when it is removed from containers. Drying at 100–130 °C (212–266 °F) for 4 hours is suggested to remove any absorbed moisture.

Everflon+™ ETFE C-4010 is supplied as pellets and packaged in 20-kg drums with a polyethylene inner lining.

# ABOUT C&F AND EVERFLON FLUOROPOLYMERS

Everflon™ is brand of C&F Group dealing in fluoropolymers materials including PTFE.FEP.PFA.ETFE and PVDF. On the basis of Everflon, C&F also developing the fluoropolymer applications including tubing,coating and films.

More information could visit [www.everflon.com](http://www.everflon.com) or Everflon™ Fluoropolymers Introduction and C&F Chemicals Book



For more information, visit [www.everflon.com](http://www.everflon.com)  
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