

## Fluon+™ LM-ETFE AH-3000L Product Information

### Description

Fluon® AH-3000L is a semiconductive modified copolymer of ethylene and tetrafluoroethylene used in applications where superior stress-cracking properties and strong adhesion to polyamide polymers, especially nylon 12, are required. It also exhibits high permeation resistance to many fluids and gases, especially automotive fuels. It is processed using conventional melt extrusion methods and is available as a 1/8" pellet.

### Typical Physical Properties

Property	Test Method	Units	Typical Property
Melt Flow Rate	ASTM D-3307	g/10 minutes	6
Specific Gravity	ASTM D-792		1.76
Melting Point	DSC	°C	234
Tensile Strength	ASTM D-638	MPa	40
Tensile Elongation	ASTM D-638	%	370
Flexural Modulus	ASTM D-790	MPa	1290
Izod Impact Strength (23°C)	ASTM D-256	J/m	No Break
Permeation Rate (CE10, 60°C)	JIS Z0208 (CUP)	g-mm/m <sup>2</sup> -day	2.0
Surface Resistivity	AGC Method	Ω/sq	6.9 x 10 <sup>3</sup>
Adhesion to PA12 (Initial)	AGC Method	N/cm	Impossible to Peel

### Product Development

This data was secured during the course of product development. Both the properties and the product are subject to change prior to final commercialization.

### Processing

Fluon LM-ETFE fluoropolymer resins can be processed using conventional melt processable techniques including extrusion, injection molding, blow molding, compression molding, and transfer molding. It is strongly recommended that process equipment exposed to molten resin be made of corrosion-resistant metals such as Monel, Inconel, or Hastelloy.

Extruder barrels should be long relative to diameter (24/1 to 30/1 and beyond) and heaters should have adequate capacity to heat the material to approximately 340°C. Temperature controllers should be of the proportional-integral derivative (PID) type to insure precise temperature control. Extruder screws with a 3/1 compression ratio, a relatively long feed zone, and a ½ to 3 turn transition zone are recommended.



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### Handling Precautions

WARNING: Vapors that can be hazardous if inhaled may be liberated during processing.

Please consult the Material Safety Data Sheet for Fluon LM-ETFE prior to use. It is also recommended that the user consult the latest edition of the "Guide to the Safe Handling of Fluoropolymer Resins" published by the Fluoropolymers Division of the Society of the Plastics Industry (SPI) for important handling and ventilation recommendations. Both publications are available from your AGC Chemicals Americas representative.

### Storage

The properties of Fluon LM-ETFE are not impacted by storage time. Storage and handling facilities should be designed to minimize contact with airborne contamination and the formulation of condensation on the resin. Fluoropolymers are not hygroscopic and will not typically need to be dried prior to use. However, masterbatches used to pigment fluoropolymers may contain materials that do absorb water and should be dried prior to use.

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