

## Fluon ETFE® and PFA Powder Grades

### Electrostatic Spray Coating Grades

Grade	Particle Size (µm)	Application Thickness	Colour	FDA	Notes
Z-8820X	20 - 30	50 - 120µm	natural/white	✓	ETFE powder grade for thin coatings.
TL-081	80 - 150	up to 800µm	natural/white	✓	ETFE powder grade for thick coatings with enhanced heat and stress crack resistance. Factory Mutual approved.
ZL-520N	70 - 80	up to 800µm	natural/white	✗	ETFE powder grade containing 20% carbon fibre for thicker coatings with reduced shrinkage (base coat).
ZL-521N	50 - 60	up to 800µm	natural/white	✗	ETFE powder grade containing 5% carbon fibre for thicker coatings with reduced shrinkage (intermediate coat; use TL-081 as top coat).
LM-2150	60 - 70	up to 800µm	natural/white	✗	ETFE powder grade with low melting point for easier processing plus a smoother, more glossy finish.
LH-8000 Powder	20 - 50	50 - 150µm	natural/white	✗	ETFE powder grade with an ultra-low melting point for easier processing plus adhesive function for better bonding with other materials.
CP-801XBK	50 - 150	up to 800µm	black	✗	ETFE black powder grade. Factory Mutual approved.
EA-2000 Powder	20 - 50	50 - 150µm	natural/white	✗	PFA powder grade with adhesive function for better bonding with other materials.

### Rotolining Grades

Grade	Particle Size (µm)	Application Thickness	Colour	FDA	Notes
TL-581	250 - 300	2 - 5mm	natural/white	✓	ETFE powder grade with enhanced heat and stress crack resistance.
LM-2300N	300 - 500	2 - 5mm	natural/white	✓	ETFE powder grade with low melting point for easier processing plus a smoother, more glossy finish

### Primers

Grade	Particle Size (µm)	Application Thickness	Colour	FDA	Notes
IL-300J Liquid Primer (ETFE)	-	-	black	✗	ETFE liquid primer
EA-2000 Fine Powder Primer	2 - 3	-	natural/white	✗	PFA powder primer with adhesive function for better bonding with other materials.

Data on this leaflet is typical property data which should not be used for specification purposes. Please contact the sales office for the latest information on product properties and development grades.

## NEW Fluon® Adhesive PFA

Fluon® adhesive EA2000 is the latest innovation in coatings technology from AGC Chemicals. The addition of AGC's unique adhesion technology to PFA means that a primer is not required. PFA is renowned for its high thermal resistance, chemical resistance and durability in aggressive environments.

#### Available in:

- o Fine Powder (Particle size = 20 - 50µm)
- o Ultra-fine Powder (Particle size = 2 - 3µm)

Property	Test Method	Units	EA2000
Tensile Strength	ASTM D-638	MPa	40
Tensile Elongation	ASTM D-638	%	330
Flexural Modulus	ASTM D-790	MPa	580
MIT (Stress-crack)	AGC Method	No of cycles	1.0 x 10 <sup>5</sup>
Melting Point	DSC	°C	298
Thermal decomposition	TGA	°C	490

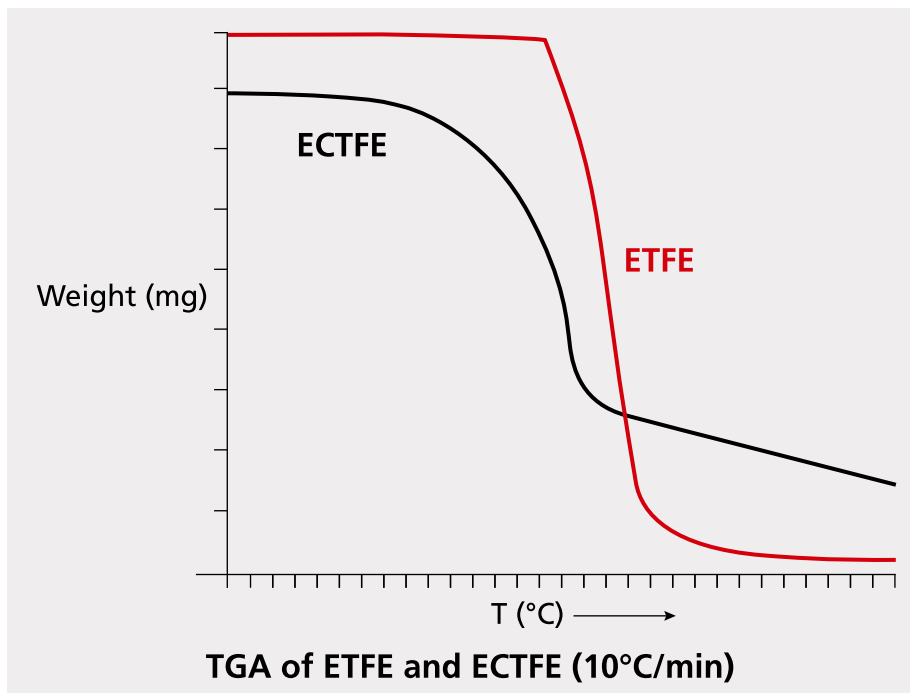
Property	Test Method	Units	EA2000 Powder
Melting Point	ASTM D3418	°C	298
MFR	ASTM D 3307	g/10mins	12
Apparent Density	AGC Method	g/ml	0.5
Angle of Repose	AGC Method	°	43

## Fluon® ETFE Coating Solutions for Aggressive Environments

Fluon® offers a range of easy-to-process ETFE powder grades for a variety of coating applications. ETFE has the benefit of chemical stability against most chemicals, including acids, alkalis and solvents over a wide temperature range. A variety of particle sizes ensures a tailored solution for requirements of coatings up to 5mm thicknesses. For spray coating, the new Fluon® liquid primer, IL300J shows improved adhesion strength and durability\*. ETFE offers one of the best choices of coatings due to the comparatively high fluorine content giving protection to the carbon backbone plus the regular packed structure offers a degree of crystallinity and barrier performance.

### Comparison with ECTFE

Property	ETFE	ECTFE
Tensile Strength (MPa)	40 - 54	32 - 39
Elongation (%)	250 - 450	250 - 330
Molecular weight	High (500,000 - 1,200,000)	Lower (100,000 - 500,00)
Melting Point (°C)	245 - 250	245 - 245
Temperature Application Range (°C)	-125 to 150	-80 to 150 (in non-load bearing applications)



\*Compared to coating without a primer