

## Masterbatch Products

When it comes to melt processable fluoropolymer compounds, no company has more experience, more varieties, or more technical expertise. More importantly, this expertise is available to customers at every step of the process. Fluon+<sup>TM</sup> Melt Processable Compounds (MPC) Masterbatches are based upon fluorinated copolymer resins: ETFE, PFA, FEP, and PVDF.

### Color Masterbatches

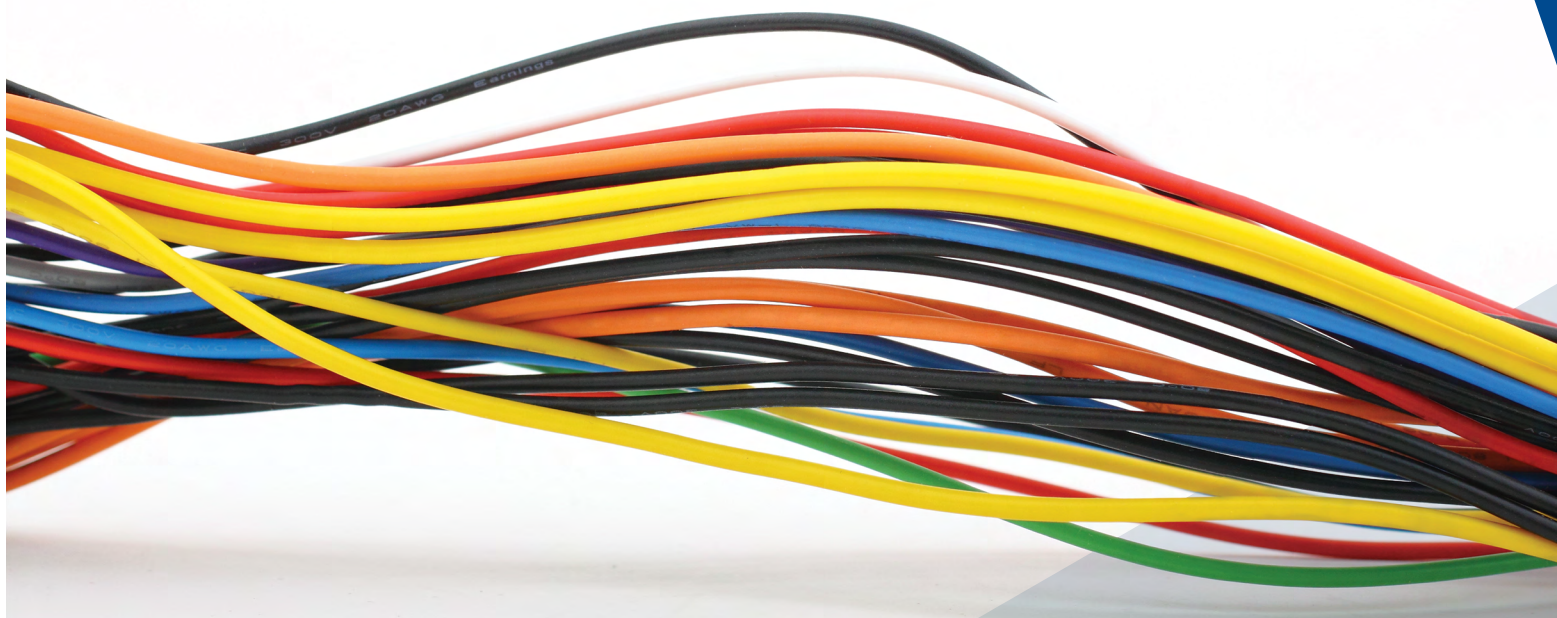
Fluon+ MPC Color Concentrates are used in injection molded parts, tubes, colored wire insulation, or any products that require pigmentation. The product line includes color concentrates based on ETFE, PFA, FEP, and PVDF melt processable fluorinated copolymers with a range of flow rates for various processing and application needs. White, Orange, Blue, Green, Brown, Red, Black, Yellow, Violet, and Gray are the standard colors available; see individual data sheets for approximate RAL and CIELAB color values.

Custom colors and color matching available upon request. The color concentrates are supplied in cylindrical pellet form, approximately 0.080-inch long by 0.080-inch diameter (2.03 mm long by 2.03 mm diameter). The typical loading level for Fluon+ MPC Color Concentrates is 1-5%; the optimal level is based on the part thickness, conductor type, and desired opacity.

Masterbatch Type	Resin	MFR Range (g/10 min)	Bulk Density Range (g/L)
Fluon+ C-88AXM HT Color Series	AGC ETFE C-88AXM HT	12~26	880~1255
Fluon+ PFA 3000 Color Series	AGC PFA P-62X	25~32	1150~1300
Fluon+ FEP 9400 and 9800 Color Series	Chemours FEP 9494X	15~30	1050~1450
Fluon+ PVDF 9 and 10 Color Series	Arkema PVDF 2850-04	9~16	950~1050

### Applications

- Injection molded parts
- Film and tubing
- Colored wire or jacket insulation



## Foam Masterbatches

Fluon+ MPC Foamed FEP products have a lower dielectric constant and a lower dissipation factor thus minimizing signal loss and enhancing high-speed data transmission of data cables. In addition, foamed products are lighter in weight compared to similar constructions using a solid wall and results in a reduction in FEP usage, which leads to a cost savings.

FEP Foam Concentrates contain a well-dispersed nucleating agent that acts as a site for foaming during the gas injection extrusion process. Standard grades are available in both high and low viscosity resins, allowing for foamed cable production of everything from LAN to coaxial cable constructions.

These concentrates are added at approximately 8-10% to neat FEP for applications requiring void contents of up to 55%. Maximum void content is dependent upon foam extrusion system, tooling designs, and concentrate level. Thinner wall constructions or applications requiring lower void content may more typically use a letdown level of 1-3%.

Masterbatch Type	Resin	MFR Range (g/10 min)	Bulk Density Range (g/L)
Fluon+ Foam Series	Chemours FEP 100X/TE-9494X	7~30	1150~1180

### Applications

- Injection molded parts
- Film and tubing

## UV and Infrared Laser Mark Masterbatches

Fluon+ UV-MARK and IR-MARK are a series of concentrates designed for use in wire and cable applications which require permanent marking. UV-MARK and IR-MARK products can be added to the jacket or insulation resin, along with a standard color concentrate, to allow most constructions to be marked via UV or Infrared laser. When used with AGC's standard color masterbatch offerings, high contrast ratios are achievable. UV-MARK and IR-MARK concentrates are based on ETFE, PFA and FEP resins and are supplied as a cylindrical pellet.

Masterbatch Type	Resin	MFR Range (g/10 min)	Bulk Density Range (g/L)
Fluon+ UV-MARK Laser Mark Series	ETFE / PFA / FEP	25~30	TBD
Fluon+ IR-MARK Laser Mark Series	ETFE / PFA / FEP	25~30	TBD

### Applications

- Fluoropolymer jacket or insulation where a laser-markable surface is required



**AGC Chemicals Americas, Inc.**  
55 E. Uwchlan Avenue, Suite 201  
Exton, PA 19341  
United States of America

Telephone: +1 610-423-4300  
Toll Free (US only): 800-424-7833  
Fax: +1 610-423-4305

**[www.agcchem.com](http://www.agcchem.com)**

Visit our website for compliance information and industry certifications.

Fluon+™ is a registered trademark of AGC, Inc.