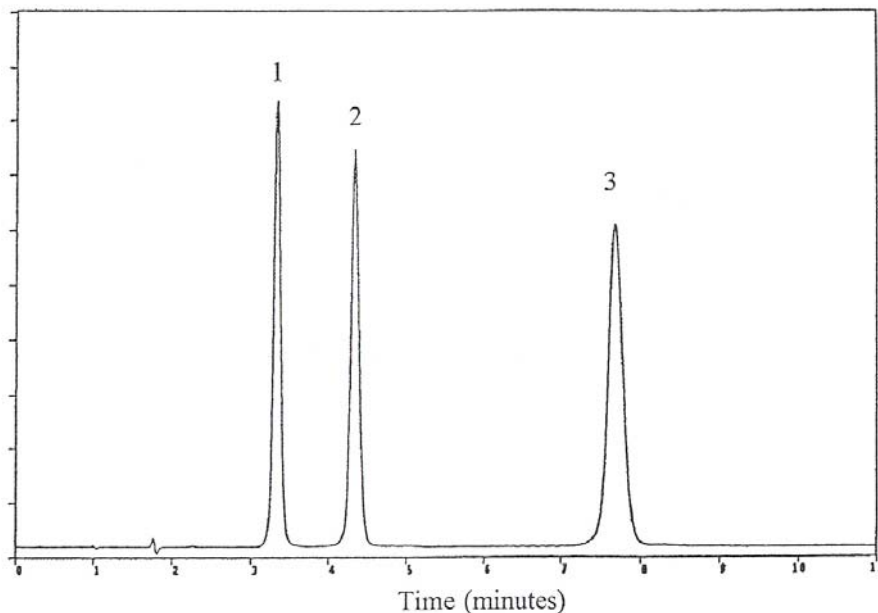


## APPLICATION NEWS

### GreenSep™ PFP SFC Columns

GreenSep™ PFP - Supercritical fluid chromatography (SFC) is a powerful chromatographic technique for the separation of complex mixtures. It has been useful in the areas of preparative chromatography and rapid analysis chromatography. Many SFC separations have been forced to utilize older types of stationary phases from “normal phase” HPLC such as unmodified silica, diol, amino and cyano. These phases are poorly adapted to SFC and present a number of limitations for SFC separations. Limitations include: low capacity, poor selectivity, and poor peak shape for SFC separations.

At ES Industries we have developed a new line specifically engineered SFC stationary phases called GreenSep SFC, one of these phases is GreenSep PFP, a fluorinated aromatic stationary phase. GreenSep PFP stationary phase has proven superior to conventional stationary phases (such as diol, cyano etc...) in the areas of separation selectivity, peak shape and loading capacity. The chromatogram shown below is a prime example of the superior performance obtainable with the GreenSep PFP column with SFC. The chemicals separated in this chromatogram are aromatic. GreenSep PFP is best suited to compounds containing aromatic groups and/or halogen groups. This stationary phase provides the SFC chromatographer with excellent tool for the separation geometrical aromatic isomer and diastereomers. GreenSep PFP can easily replace conventional stationary phases used in SFC and deliver superior performance.



GreenSep PFP 5 $\mu$ m  
250 X 4.6mm ID

Mobile Phase:  
CO<sub>2</sub>/Methanol  
(95/5 v/v)  
Temp: = 25 °C  
Flow: 2 mL/min  
Detection: UV @ 254nm

1. Naphthalene
2. Phenanthrene
3. Pyrene

GreenSep™ PFP 5u 120A				
	<u>4.6mm (ID)</u>	<u>4.0mm (ID)</u>	<u>3.2mm (ID)</u>	<u>2.1mm (ID)</u>
5cm	115291-GS-PFP	114291-GS-PFP	11d291-GS-PFP	112291-GS-PFP
10cm	125291-GS-PFP	124291-GS-PFP	12d291-GS-PFP	122291-GS-PFP
15cm	135291-GS-PFP	134291-GS-PFP	13d291-GS-PFP	132291-GS-PFP
25cm	155291-GS-PFP	154291-GS-PFP	15d291-GS-PFP	152291-GS-PFP

GreenSep™ PFP 10u 120A				
	<u>4.6mm (ID)</u>	<u>4.0mm (ID)</u>	<u>3.2mm (ID)</u>	<u>2.1mm (ID)</u>
10cm	125391-GS-PFP	124391-GS-PFP	12d391-GS-PFP	122391-GS-PFP
15cm	135391-GS-PFP	134391-GS-PFP	13d391-GS-PFP	132391-GS-PFP
25cm	155391-GS-PFP	154391-GS-PFP	15d391-GS-PFP	152391-GS-PFP
30cm	165391-GS-PFP	164391-GS-PFP	16d391-GS-PFP	162391-GS-PFP