

## APPLICATION NEWS

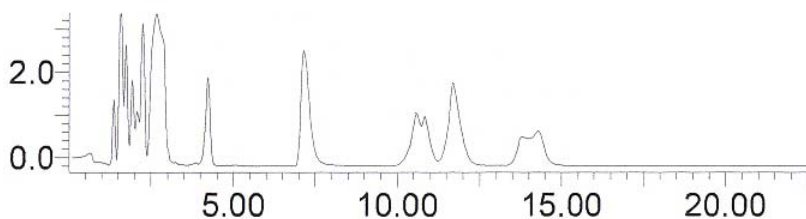
### GreenSep™ Amino Phenyl SFC Columns

GreenSep™ *Amino Phenyl* - 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 stationary phases specifically engineered for SFC separations, one of these phases is GreenSep Amino Phenyl. This 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 peak shape performance and separation capacity obtainable with the GreenSep Amino Phenyl column with SFC. The chromatogram contains chemicals that are functionalized with amine groups and acidic groups, demonstrates the flexibility that GreenSep Amino Phenyl can deliver to the SFC chromatographer. GreenSep Amino Phenyl is the SFC column ideally suited for the retention and rapid separation of chemicals containing acidic groups. GreenSep Amino Phenyl can easily replace conventional stationary phases used in SFC and deliver superior performance.

GreenSep Amino Phenyl 250 X 4.6mm, 5um  
Catalog # 155291-GS-A/PH

15% Methanol in Co2  
Pressure 100bar  
Flow: 3mL/min  
Detection: PDA



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|-------------------|-------------------------|
| 1. Butyl benzoate | 8. Sorbic acid          |
| 2. 4-nitrotoluene | 9. Napthalene           |
| 3. 2-nitrophenol  | 10. Ibuprofen           |
| 4. Caffeine       | 11. N-benzylbenzamide   |
| 5. Antipyren      | 12. 1-aminoisoquinoline |
| 6. Oxprenolol     | 13. Propranolol         |
| 7. Niacinamide    |                         |

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GreenSep™ Amino Phenyl 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-APH	114291-GS-APH	11d291-GS-APH	112291-GS-APH
10cm	125291-GS-APH	124291-GS-APH	12d291-GS-APH	122291-GS-APH
15cm	135291-GS-APH	134291-GS-APH	13d291-GS-APH	132291-GS-APH
25cm	155291-GS-APH	154291-GS-APH	15d291-GS-APH	152291-GS-APH

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GreenSep™ Amino Phenyl 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-APH	124391-GS-APH	12d391-GS-APH	122391-GS-APH
15cm	135391-GS-APH	134391-GS-APH	13d391-GS-APH	132391-GS-APH
25cm	155391-GS-APH	154391-GS-APH	15d391-GS-APH	152391-GS-APH
30cm	165391-GS-APH	164391-GS-APH	16d391-GS-APH	162391-GS-APH

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