



## APPLICATION NEWS

### GreenSep™ Pyridyl Amide SFC Columns

GreenSep™ *Pyridyl Amide* - 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 Pyridyl Amide. GreenSep Pyridyl Amide 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 obtainable with the GreenSep Pyridyl Amide column with SFC. The type of chemicals separated in this chromatogram would normally require the addition of TFA or an amine to the mobile phase; however Pyridyl Amide does not require the addition of these peak shape modifiers. The chromatogram contains chemicals that are functionalized with both amine bases and acidic groups, demonstrates the flexibility that GreenSep Pyridyl Amide can deliver to the SFC chromatographer. Mobile phase composition and fraction collection is greatly simplified without the use of amino or TFA additives. GreenSep Pyridyl Amide can easily replace conventional stationary phases used in SFC and deliver superior performance.

