



APPLICATION NEWS

Epic HILIC-POH HPLC Columns

Reversed-phase HPLC is widely used for separation of a variety of compounds. However, retention and separation of many polar compounds has proven to be a challenge. Many of these types of compounds are unretained or poorly retained on most conventional reversed-phase stationary phases, such as ODS. Fortunately, to deal with these types of analytes an alternative mode of chromatography can be utilized using polar stationary phases and highly organic mobile phases. This mode of chromatography has been utilized for many years and is referred to as “hydrophilic interaction chromatography” or HILIC. HILIC chromatography uses mobile phases containing between 5 – 20 % water for the retention of polar compounds.

Epic HILIC-POH (POH for polyhydroxylated) is a new stationary phase for HILIC chromatography. It is composed of a polyhydroxylated polymer coated and bound to silica. This composition provides hydroxyl levels that are well above conventional hydroxyl and diol type stationary phases. Many of the commercially stationary phases used for HILIC chromatography are converted normal phase columns. These normal phase columns yield poor methods, poor separations and lack durability. Epic HILIC-POH is specifically designed for HILIC chromatography and can achieve high performance separations, yield rugged methods and deliver long column life times. One example of a separation performed on Epic HILIC-POH is shown below. The chromatogram shows the separation and retention of two highly polar compounds – Dehydroascorbic acid (DHAA) and ascorbic acid (AA).

