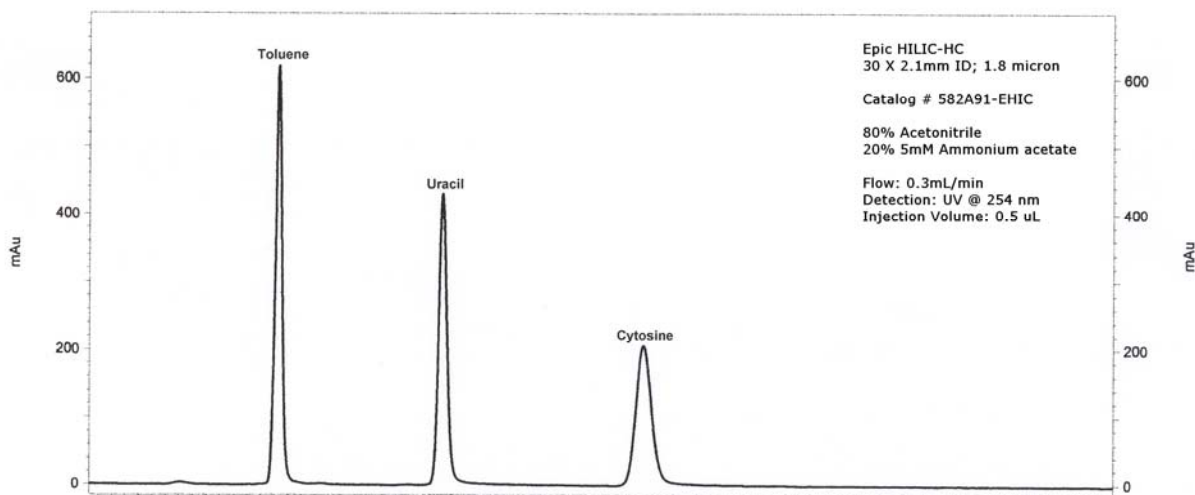


 INDUSTRIES	Epic HILIC-HC Sub-2 Micron HPLC Columns
	Application News 701 South Route 73 • West Berlin, New Jersey 08091-2621 • (856) 753-8400 • Fax (856) 753-8484

Reversed-phase HPLC is widely used for separation of many pharmaceutical compounds. However, retention and separation of many polar analytes 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-HC (HC for high capacity) 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-HC is specifically designed for HILIC chromatography and can achieve high performance separations, yield rugged methods and deliver long column life times. Other examples of separations performed on Epic HILIC-HC are also shown.

To extend the performance of Epic HILIC-HC ES Industries is pleased to introduce Epic HILIC-HC 1.8 μ m columns for use with ultra high pressure liquid chromatographs. These columns have been engineered specifically for chromatography at pressures up to 19000 psi. The Epic 1.8 μ m columns will provide the chromatographer with the highest resolution over a wide variety of flow rate conditions and mobile phase compositions. The chromatogram shown below highlights the unique capability for Epic HILIC-HC, in this chromatogram toluene is less retained than uracil. Uracil has been traditionally used as an unretained marker for the determination of void volume, however with Epic HILIC-HC and an 80% acetonitrile mobile phase uracil can be retained.



Epic HILIC-HC

<i>HILIC-HC</i>	<i>1.8 micron</i>	<i>3.0mm ID</i>	<i>2.1mm ID</i>	<i>1.0mm ID</i>
3cm		583A91-EHIC	582A91-EHIC	581A91-EHIC
5cm		513A91-EHIC	582A91-EHIC	581A91-EHIC
10cm		523A91-EHIC	523A91-EHIC	523A91-EHIC

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