

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

ES Industries is pleased to introduce a line of Epic 1.8 μ m HILIC HPLC columns for use with ultra high pressure liquid chromatographs. 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. The new ES Industries Epic 1.8 μ m HILIC HPLC columns have been engineered to specifically for HILIC chromatography at pressures up to 15000 psi. ES Industries expertise in the silica surface modification and bond stationary technology has enabled us to develop a number of stationary phases based on the 1.8 μ m particle technology. With this breakthrough the chromatographer is not limited to typical HILIC type phases. The Epic 1.8 μ m HILIC columns will provide the chromatographer with the highest resolution over a wide variety flow rate conditions and mobile compositions. In order to take full advantage of the HILIC mode of chromatography we have developed a line 1.8 μ m columns. The following stationary phases are available for Epic HILIC 1.8 μ m columns:

Epic Silica HILIC

Epic Silica HILIC 1.8 μ m columns have been specifically developed for HILIC chromatography. The combination of tight particle size control and high specific surface area deliver superior performance for HILIC separations.

Epic Diol HILIC

Epic Diol HILIC 1.8 μ m columns have been specifically developed for HILIC chromatography. The combination of tight particle size control and our proprietary high density bonding technology deliver superior performance for HILIC separations.

Epic HILIC-FL

Epic HILIC-FL is useful for retention and separation of polar and non compounds. It consists of a fluorinated based stationary phase bound to silica. This composition provides for excellent retention/peak shape for polar halogenated, polar amines and polar aromatic compounds. Epic HILIC-FL is specifically designed for HILIC chromatography and can achieve high performance separations, yield rugged methods and deliver long column life times. Epic HILIC-FL is an excellent choice for samples containing polar halogenated, polar amines and polar aromatic compounds where superior retention and peak shape is essential.

Epic HILIC-PI

Epic HILIC-PI is useful for retention and separation of polar and non compounds. Epic HILIC-PI is a new stationary phase for HILIC chromatography. It consists of an aromatic amine based stationary phase bound to silica. This composition provides for excellent retention and peak shape for polar amine compounds. Epic HILIC-PI is specifically designed for HILIC chromatography and can achieve high performance separations, yield rugged methods and deliver long column life times. Epic HILIC-PI is an excellent choice for samples containing polar amines where superior retention and peak shape are essential.

Epic Silica HILIC 1.8u 120A

	<u>3.0mm (ID)</u>	<u>2.1mm (ID)</u>	<u>1.0mm (ID)</u>
3cm	183A91-ESI	182A91-ESI	181A91-ESI
5cm	113A91-ESI	112A91-ESI	111A91-ESI
10cm	123A91-ESI	122A91-ESI	121A91-ESI
15cm	133A91-ESI	132A91-ESI	131A91-ESI

Epic Diol HILIC 1.8u 120A

	<u>3.0mm (ID)</u>	<u>2.1mm (ID)</u>	<u>1.0mm (ID)</u>
3cm	183A91-ED	182A91-ED	181A91-ED
5cm	113A91-ED	112A91-ED	111A91-ED
10cm	123A91-ED	122A91-ED	121A91-ED
15cm	133A91-ED	132A91-ED	131A91-ED

Epic HILIC FL 1.8u 120A

	<u>3.0mm (ID)</u>	<u>2.1mm (ID)</u>	<u>1.0mm (ID)</u>
3cm	183A91-EHIC-FL	182A91-EHIC-FL	181A91-EHIC-FL
5cm	113A91-EHIC-FL	112A91-EHIC-FL	111A91-EHIC-FL
10cm	123A91-EHIC-FL	122A91-EHIC-FL	121A91-EHIC-FL
15cm	133A91-EHIC-FL	132A91-EHIC-FL	131A91-EHIC-FL

Epic HILIC PI 1.8u 120A

	<u>3.0mm (ID)</u>	<u>2.1mm (ID)</u>	<u>1.0mm (ID)</u>
3cm	183A91-EHIC-PI	182A91-EHIC-PI	181A91-EHIC-PI
5cm	113A91-EHIC-PI	112A91-EHIC-PI	111A91-EHIC-PI
10cm	123A91-EHIC-PI	122A91-EHIC-PI	121A91-EHIC-PI
15cm	133A91-EHIC-PI	132A91-EHIC-PI	131A91-EHIC-PI

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