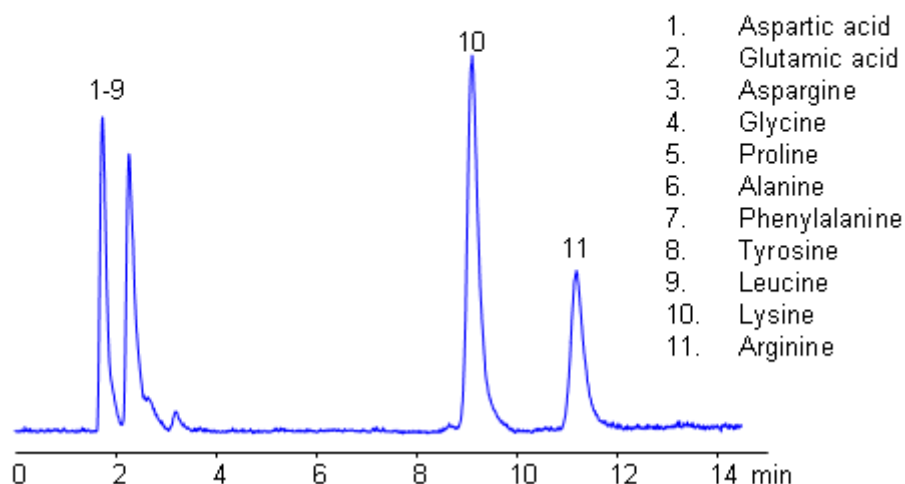


HPLC Separation of Lysine and Arginine from Other Amino Acids

<https://sielc.com/Application-HPLC-Separation-of-Lysine-and-Arginine-from-Other-Amino-Acids>

Chromatogram

Column: Primesep C
Size: 4.6 x 150 mm
Mobile phase: MeCN 15% with 15 mM AmAc pH 5.0
Flow: 1.0 mL/min
Detection: ELSD



Description

Application Notes: Amino acids are polar ionic compounds which are not retained on reversed-phase column without ion-pairing reagent. In our application, lysine and arginine can be separated from other amino acids. Amino acids with a pI between 3 and 5 and with one basic and one acidic group become very polar. Therefore these amino acids don't have strong ion-exchange interaction with Primesep C stationary phase. Amino acids with two amino groups still carry positive net charge and can interact with stationary phase by cations-exchange mechanism. pH variation of the mobile phase can be an effective tool to adjust selectivity of separation for zwitter-ionic, basic and acidic compounds. This method can be used for separation of mono-charged compounds from compounds having an extra charge.

Application Columns: Primesep C Application compounds: Aspartic acid, Glutamic acid, Asparagine, Glycine, Proline, Alanine, Phenylalanine, Tyrosine, Leucine, Lysine, Arginine Detection technique: UV, LC/MS, ELSD/CAD

Method Parameters

Mobile Phase	MeCN – 15%
Buffer	AmAc pH 5.0- 15 mM
Flow Rate	1.0 ml/min
Detection	ELSD
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Vitamin, Supplements
Analyzing Compounds	Aspartic acid, Glutamic acid, Asparagine, Glycine, Proline, Alanine, Phenylalanine, Tyrosine, Leucine, Lysine, Arginine

HPLC Column Used

Primesep C, 4.6x150 mm, 5 µm, 100A

[Order this column at hplc-shop.de](http://hplc-shop.de) →