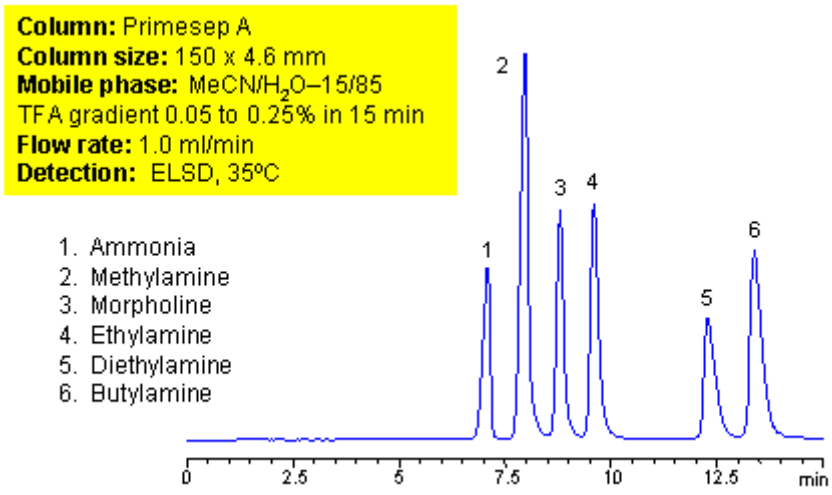
HPLC Method for Separation of Ammonia, Primary and Secondary Amines on Primesep A Column

https://sielc.com/application-mixed-mode-retention-and-separation-of-ammonia-primary-and-secondary-amines-on-primesep-a-column

Chromatogram



Description

· Separation type: Liquid Chromatography Mixed-mode

Ammonia, primary and secondary amines are common compounds used as building blocks in organic synthesis. Derivatives of these compounds are used in agriculture, pharmaceutical, and chemical manufacturing. All compounds in this application are basic and hydrophilic in nature. Problems in analysis include poor peak shape, lack of retention on C18 columns, and absence of chromophores in ammonia, primary and secondary amines. Analysis of hydrophilic amines requires derivatization to provide hydrophobicity/retention and UV activity, ion-pairing reagents to provide retention. Presence of residual silanols will affect peak shape. Ammonia, methylamine, morpholine, ethylamine, diethylamine, and butylamine can be analyzed on a Primesep A HPLC column with trifluoroacetic acid in the mobile phase. Compounds in the mixture can be monitored by ELSD.