

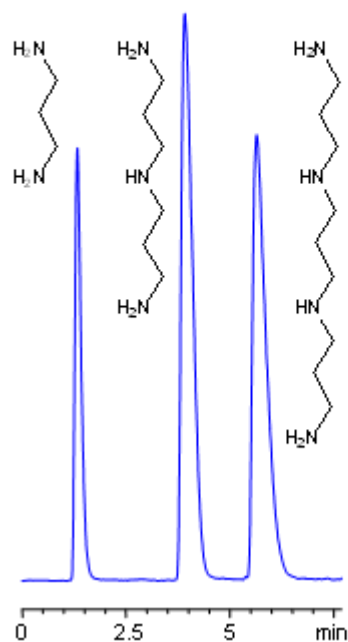
# HPLC Separation of Polyamines

<https://sielc.com/Application-HPLC-Separation-of-Polyamines>

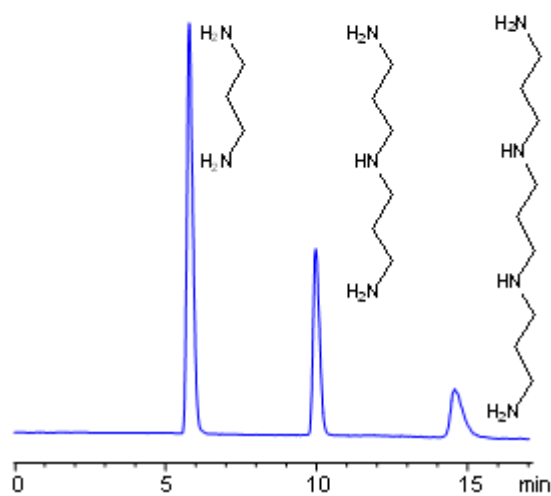
## Chromatogram

Column: Primesep 200; 10 x 3.2 mm  
Flow rate: 0.5 ml/min.  
Detection: ELSD  
Mobile phase: ACN/Water-20/80 with TFA  
gradient 0.05-0.35% in 6 min

- 1,3-diaminopropane
- N-(3-aminopropyl)-1,3-propanediamine
- N,N'-bis-(3-aminopropyl)-1,3-propanediamine



Column: Primesep C, 50 x 4.6 mm  
Mobile phase: MeCN – 20%, gradient  
AmAc 25-0 mM pH 4.0 and AmFm 0-  
25 mM pH 3.0 in 10 min + 10 min hold  
Flow rate: 1.0 mL/min  
Injection: 5µL



## Description

Primesep 200 separates the very hydrophilic polyamines, 1,3-diaminopropane, N-(3-aminopropyl)-1,3-diaminepropane, N,N-bis-(3-aminopropyl)-1,3-diaminepropane. The retention and resolution are affected by either a TFA concentration gradient, or a pH gradient from pH 4 to 3. This flexibility is obtained by simple mobile phases of water, acetonitrile (MeCN, ACN), ammonium formate, ammonium acetate or trifluoroacetic acid (TFA) with evaporative light scattering detection (ELSD).