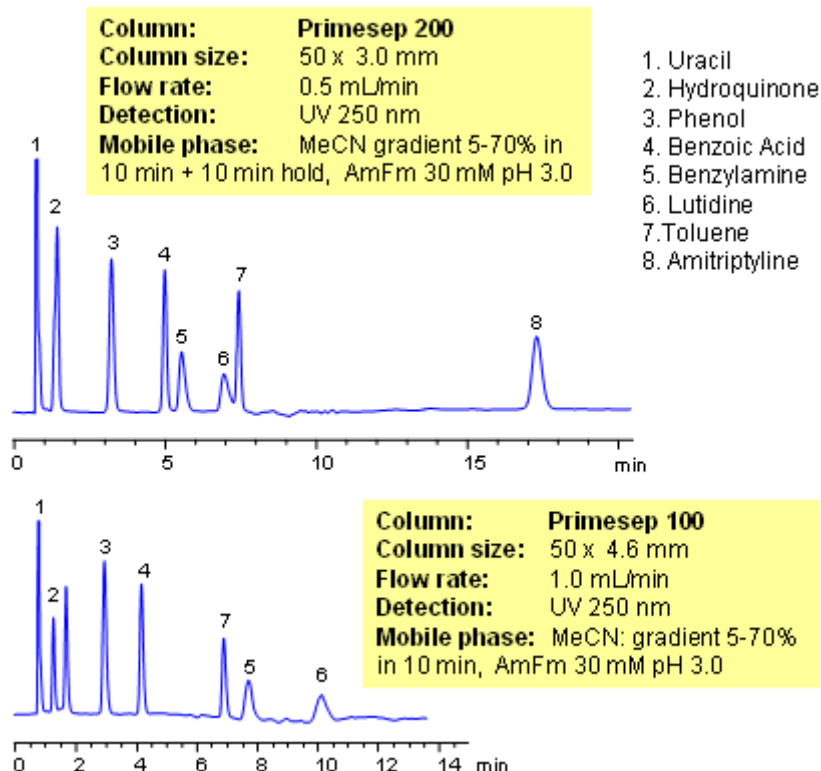


HPLC Separation of 8 Generic Compounds on Primesep 100

<https://sielc.com/Application-HPLC-Separation-of-8-Generic-Compounds-on-Primesep-100>

Chromatogram



Description

Mixed-mode HPLC columns allow to analyze compounds with drastically different properties in one run. Acidic, basic, and neutral compounds can be separated in one run using either isocratic or gradient conditions. In this application, neutral hydrophilic (uracil, phenol and hydroquinone), neutral hydrophobic (toluene), hydrophilic acidic (benzoic acid), hydrophilic basic (lutidine) and hydrophobic basic (amitriptyline) are separated using gradient of ACN. Neutral compounds are retained by reversed-phase mechanism, hydrophilic acidic compound become more hydrophobic at lower pH and retain by reversed-phase mechanism too. Basic compounds are retained by cation exchange mechanism, and hydrophobic basic compounds are retained by reversed-phase and cation-exchange mechanisms. All compounds are resolved within 17 minutes on a short column. Method can be applied to various polar and hydrophobic compounds, which can be separated on one column and in one run. Mixed-mode columns can operate in single or combination of several modes: reversed-phase, ion-exchange, ion-exclusion and HILIC. This mixed-mode HPLC column can be used as a general column for separation of wide range of compounds.

Method Parameters

Mobile Phase	MeCN/H ₂ O
Buffer	AmFm pH3.0
Flow Rate	0.5 ml/min, 1.0 ml/min
Detection	UV, 250 nm
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Hormone

Analyzing Compounds

Uracil, Hydroquinone, Phenol, Benzoic Acid, Benzylamine, Lutidine, Toluene, Amitriptyline

HPLC Column Used

Primesep 200, Primesep 100 5 µm, 100A

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