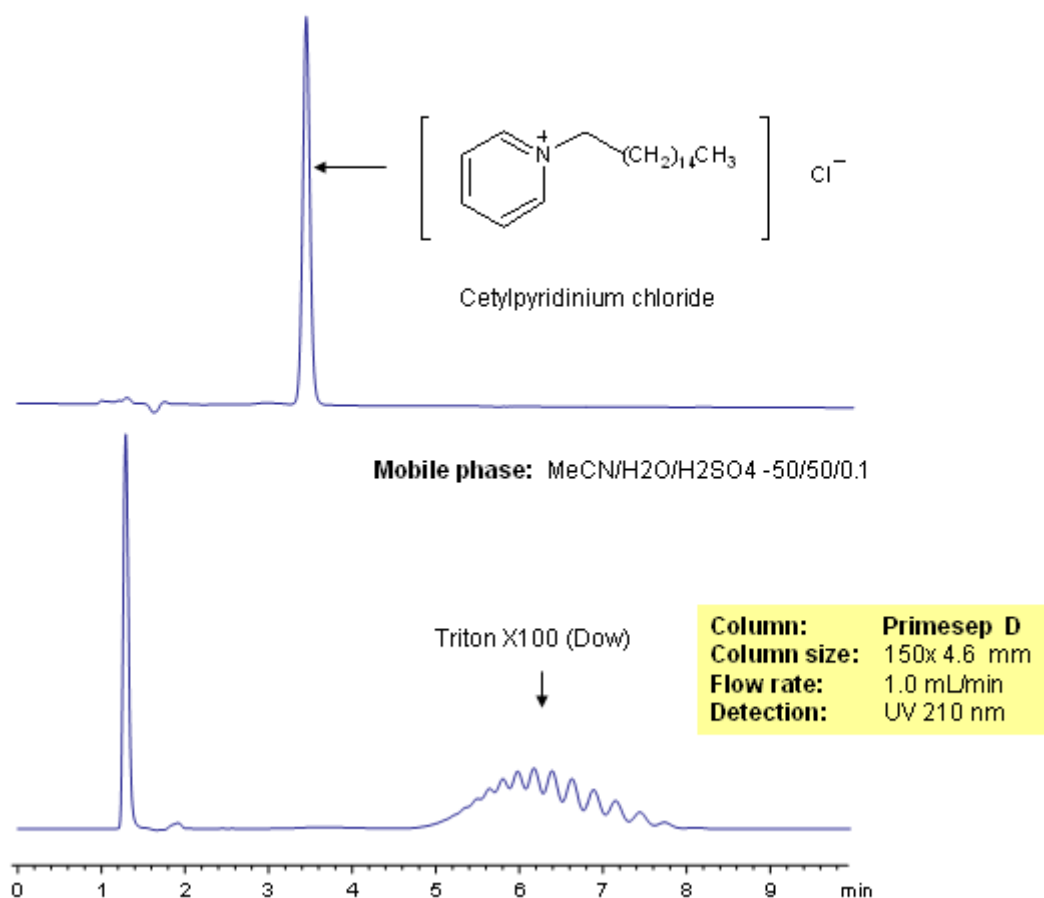


HPLC Separation of Surfactants

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

Chromatogram



Description

Surfactants are molecules that contain both hydrophilic and hydrophobic groups, usually in the form of a hydrophilic head and a hydrophobic tail. Surfactants are used in detergents where they can form micelles around hydrophobic dirt molecules and wash them away. Triton X-100 is a surfactant with a hydrophilic polyethylene oxide chain that can be separated on a Primesep D reverse-phase HPLC column based on the number of oxide units in the chain. The mobile phase is water, acetonitrile (MeCN, ACN) and sulfuric acid as buffer. UV detection at 210nm.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 50/50%
Buffer	H ₂ SO ₄ - 0.1%
Flow Rate	1.0 ml/min
Detection	UV 210nm
Class of Compounds	Surfactant, Hydrophobic, Ionizable
Analyzing Compounds	Triton X-100, Cetylpyridinium Chloride

HPLC Column Used

Primesep D, 4.6x50 mm, 5 µm, 100A

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