

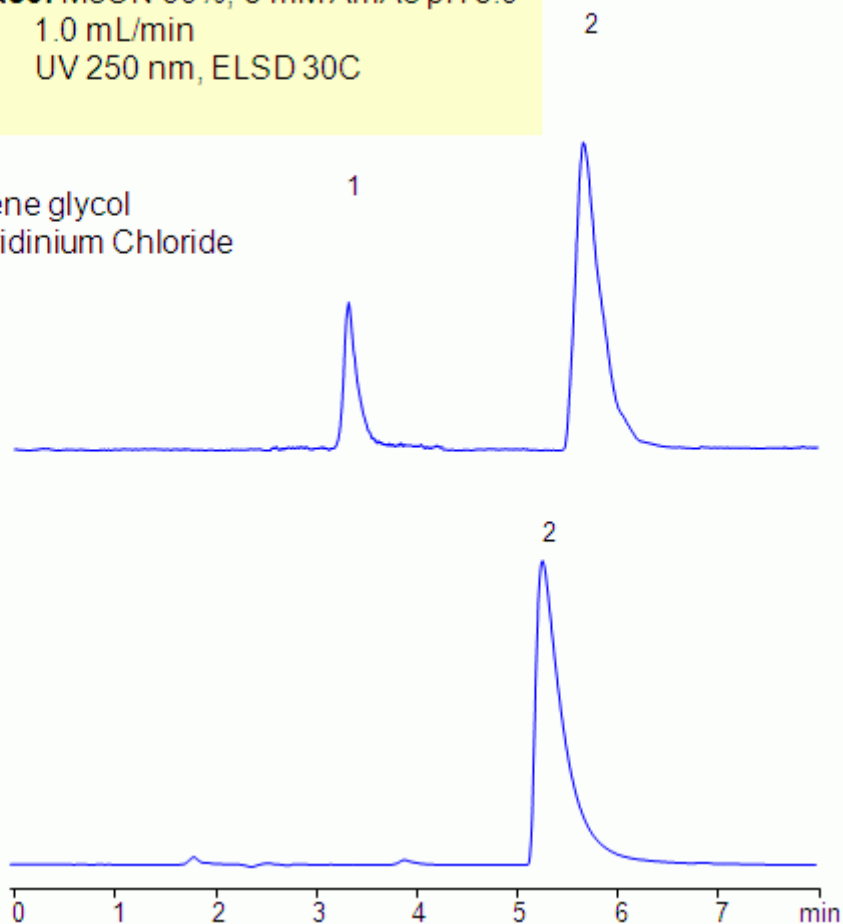
HPLC Method for Analysis of Cetylpyridinium Chloride and Triethylene Glycol on Obelisc N Column

<https://sielc.com/Application-HPLC-Separation-of-Cetylpyridinium-Chloride-and-Triethylene-Glycol>

Chromatogram

Column: Obelisc N
Size: 4.6 x 150mm
Mobile phase: MeCN 90%, 5 mM AmAc pH 5.0
Flow: 1.0 mL/min
Detection: UV 250 nm, ELSD 30C

1. Triethylene glycol
2. Cetylpyridinium Chloride



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Description

Cetylpyridinium chloride is hydrophobic basic compound and triethylene glycol is hydrophilic neutral compounds. Quantitative analysis of both compounds is problematic due to a different nature of these two analytes. Both compounds were analyzed on an Obelisc N column in HILIC/cation-exchange mode. Cetylpyridinium chloride is retained by cation-exchange mechanism, and triethylene glycol is retained by HILIC mechanism. Mixed-mode HILIC approach allows to retain compounds either based on multiple or single mechanisms interaction, thus providing a valuable approach for analysis. Cetylpyridinium chloride and triethylene glycol can be monitored by combination of UV and ELSD/CAD.

Method Parameters

Mobile Phase	MeCN/H ₂ O
Buffer	AmAc pH 5.0

Flow Rate	1.0 ml/min
Detection	UV 250nm, ELSD
Class of Compounds	Surfactant, Hydrophobic, Ionizable
Analyzing Compounds	Triethylene glycol, Cetylpyridinium Chloride

HPLC Column Used

Obelisc N, 4.6×150 mm, 5 µm, 100A

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