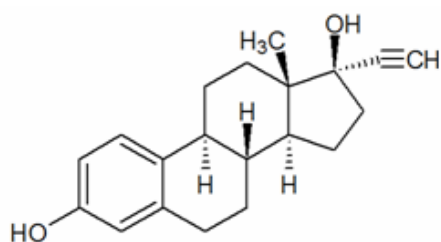


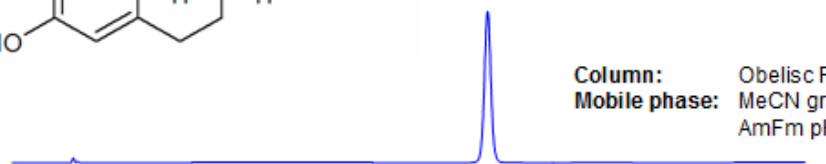
# HPLC Analysis of 17 $\alpha$ -Ethinylestradiol

<https://sielc.com/Application-HPLC-Analysis-of-17a-Ethinylestradiol>

## Chromatogram



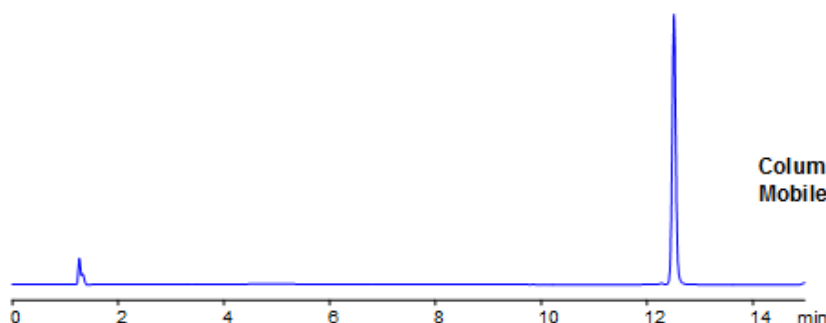
**Size:** 2.1 x 150 mm  
**Flow:** 0.4 mL/min  
**Detection:** UV 270 nm



**Column:** Obelisc R  
**Mobile phase:** MeCN gradient 25% to 70% in 15 min,  
AmFm pH 3.0 gradient from 30 mM to 60 mM



**Column:** Obelisc R  
**Mobile phase:** MeCN gradient 10% to 70% in 15 min,  
AmFm pH 3.0 gradient from 20 mM to 60 mM



**Column:** Primesep 100  
**Mobile phase:** MeCN gradient 10% to 70%  
in 15 min, AmFm pH 3.0 gradient  
from 20 mM to 60 mM

## Description

17 $\alpha$ -Ethinylestradiol or Ethynyl Estradiol (EE2) is a partially synthetic steroidal estrogen and one of the most commonly used drugs for use in oral contraceptives. EE2 is an estrogen since it activates the estrogen receptor. While dosing of EE2 has been lowered in oral contraceptives, worries about water contamination made an analysis of EE2 necessary. Obelisc R and Primesep 100 were used to demonstrate their unique modes of separation. Method is LC/MS compatible and able to be replicated for many different pesticides.

## Method Parameters

<b>Mobile Phase</b>	Gradient MeCN – 10-70%, 15 min
<b>Buffer</b>	Gradient AmAc pH 3.0- 20-60 mM, 15 min
<b>Flow Rate</b>	0.4 ml/min
<b>Detection</b>	UV, 270 nm
<b>Class of Compounds</b>	Hormone, Hydrophobic, Ionizable
<b>Analyzing Compounds</b>	17 $\alpha$ -Ethinylestradiol

## HPLC Column Used

**Primesep 100, 2.1×150 mm, 5 µm, 100A**

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