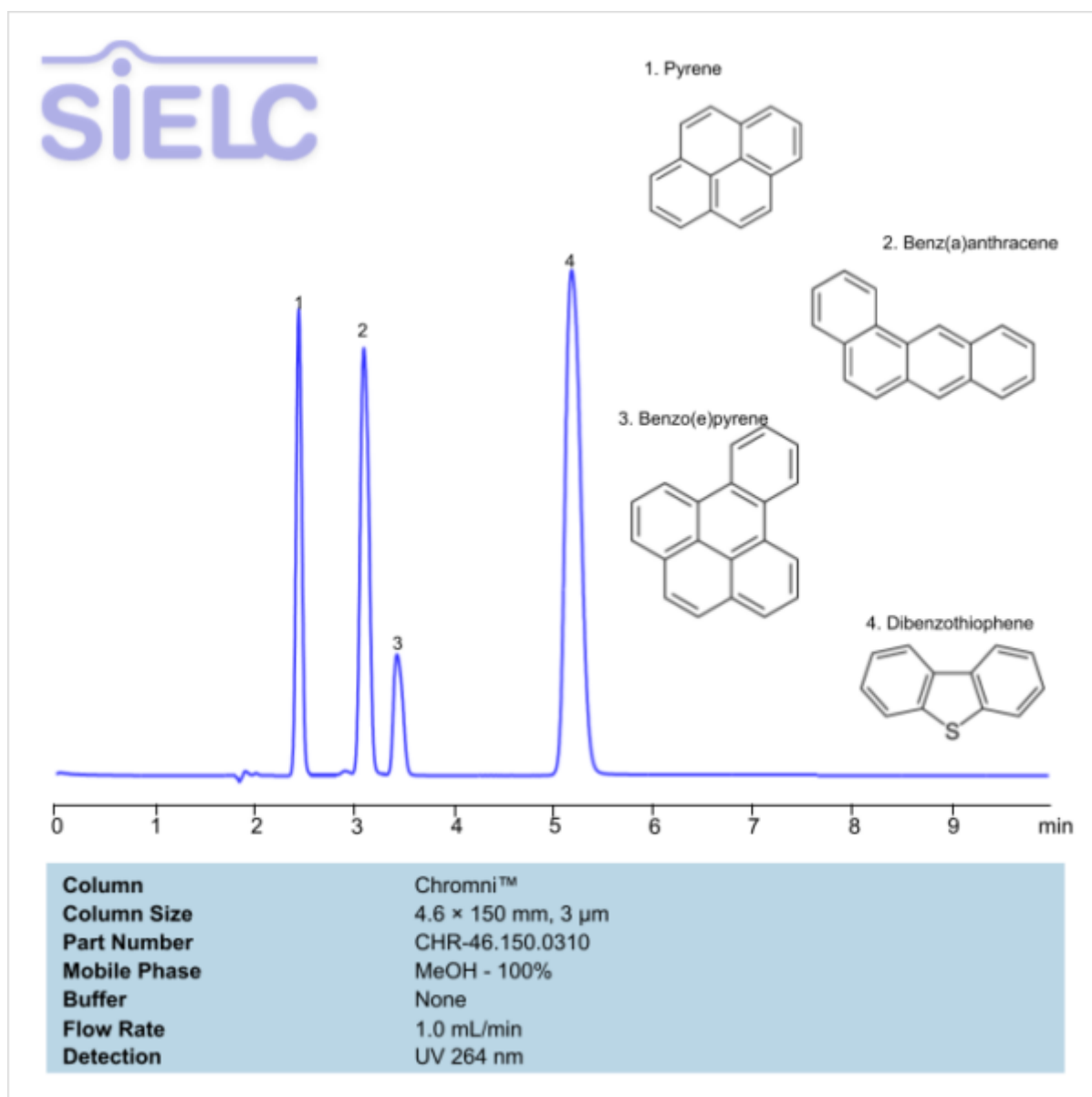


HPLC UV Method for Analysis of Polycyclic Aromatic Compounds (PACs) on Chromni Column

<https://sielc.com/hplc-uv-of-polycyclic-aromatic-compounds>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Pyrene , Benzo[e]pyrene , Benz(a)anthracene , Dibenzothiophene .

Pyrene is a polycyclic aromatic hydrocarbon with the chemical formula $C_{16}H_{10}$. It is formed during incomplete combustion of organic compounds. It is one of the most studied organic molecules in the world when it comes to its photophysical properties. Its fluorescence emission spectrum is sensitive to the polarity of the solvent. You can find detailed UV spectra of Pyrene and information about its various lambda maxima by visiting the following link.

Benz(a)anthracene is a polycyclic aromatic hydrocarbon with the chemical formula $C_{18}H_{12}$. It is a carcinogen that is produced during incomplete combustion of organic matter. You can find detailed UV spectra of Benz(a)anthracene and information about its various lambda maxima by visiting the following link.

Benzo(e)pyrene is a polycyclic aromatic hydrocarbon with the chemical formula C₂₀H₁₂. You can find detailed UV spectra of Pyrene, Benzo[e]pyrene, Benz(a)anthracene, Dibenzothiophene and information about its various lambda maxima by visiting the following link.

Dibenzothiophene, also written as DBT and diphenylene sulfide, is an organosulfuric compound with the chemical formula C₁₂H₈S. It is primarily found as a problematic impurity in petroleum. DBT is prepared by the reaction of biphenyl and sulfur dichloride when aluminum chloride is present. You can find detailed UV spectra of Pyrene, Benzo[e]pyrene, Benz(a)anthracene, Dibenzothiophene and information about its various lambda maxima by visiting the following link.

Pyrene, Benzo[e]pyrene, Benz(a)anthracene, Dibenzothiophene can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a [buffer] buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeOH – 100%
Buffer	None
Flow Rate	1.0 mL/min
Detection	UV 264 nm
Class of Compounds	Polycyclic Aromatic Carbon
Analyzing Compounds	Pyrene,Benzo[e]pyrene,Benz(a)anthracene,Dibenzothiophene

HPLC Column Used

Chromni, 4.6 x 150 mm, 3 µm, 100 Å, dual ended

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