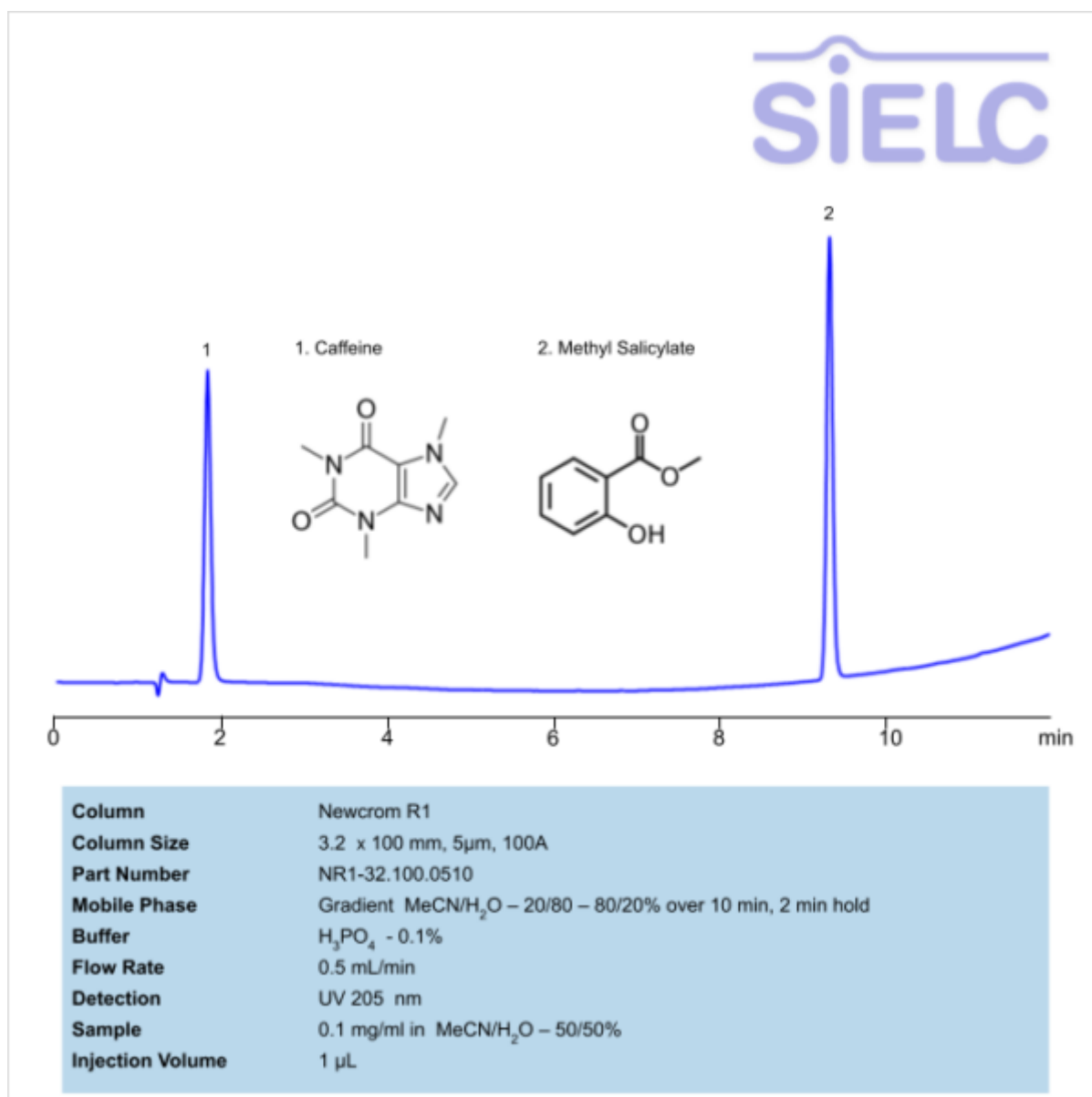


HPLC Method for Analysis of Caffeine and Methyl Salicylate on Newcrom R1 Column

<https://sielc.com/hplc-method-for-analysis-of-caffeine-and-methyl-salicylate>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Caffeine , Methyl salicylate .

Caffeine is a natural stimulant and methylxanthine alkaloid. with the molecular formula C₈H₁₀N₄O₂. Caffeine can be found in a variety of plants, including tea, coffee, cocoa, kola nuts, and guarana. Ingestion of it can increase alertness and cognitive function. It can also cause worsening anxiety, heart palpitations, and headaches. You can find detailed UV spectra of Caffeine and information about its various lambda maxima by visiting the following link.

Methyl Salicylate , also known as oil of wintergreen and wintergreen oil , is a methyl ester of salicylic acid with the formula C₈H₈O₃. It is used primarily as a flavoring and fragrance in root beer, chewing gum, mints, and more. In medical contexts, it is used as a rubefacient and analgesic in deep heating liniments to treat muscular pain, despite the effects being reported as minimal in double blind studies. You can find detailed UV spectra of Methyl Salicylate and information about its various lambda maxima by visiting the following link.

Caffeine , Methyl salicylate can be retained and analyzed using the Newcrom R1 stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) and phosphoric acid. Detection is performed using UV.

Method Parameters

Mobile Phase	Gradient MeCN/H2O
Buffer	H2PO4– 0.1%
Flow Rate	0.5 ml/min
Detection	UV 205 nm
Class of Compounds	Compounds
Analyzing Compounds	Caffeine,Methyl salicylate

HPLC Column Used

Newcrom R1, 3.2 x 100 mm, 5 µm, 100 A, dual ended

[Order this column at hplc-shop.de →](#)