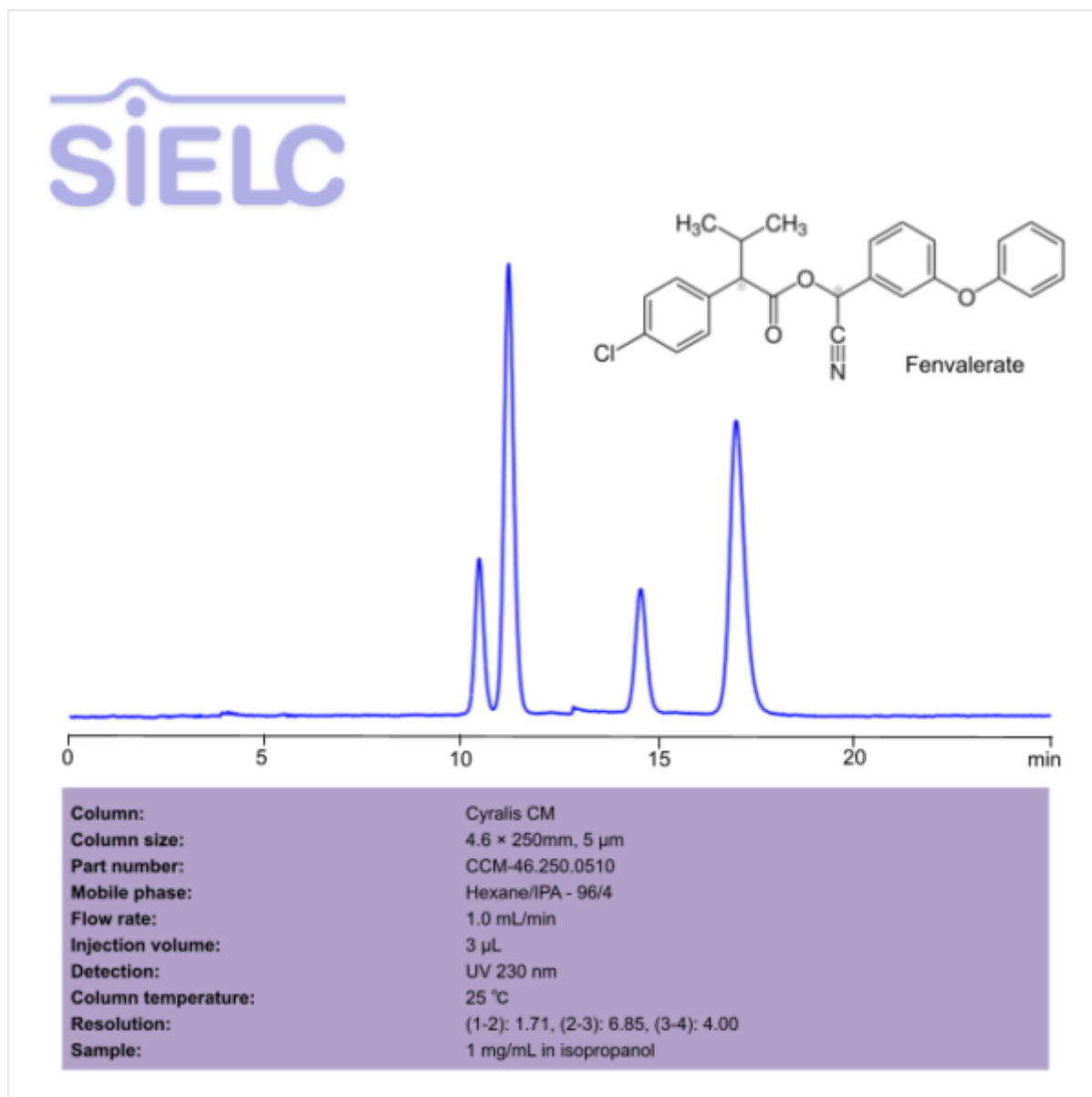


HPLC Chiral Separation of Fenvalerate on Cyralis CM Column

<https://sielc.com/hplc-method-for-fenvalerate>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Fenvalerate .

Fenvalerate is synthetic pyrethroid insecticide with the chemical formula $C_{25}H_{22}ClNO_3$. It is used against a wide range of pests, partially due to its moderate mammalian toxicity following short-term and acute exposure. It is the most toxic to bees and fish. Upon contact, it may irritate skin and eyes.

You can find detailed UV spectra of Fenvalerate and information about its various lambda maxima by visiting the following link.

This application describes a normal-phase chiral HPLC method for the separation of Fenvalerate enantiomers using SIELC's Cyralis CM chiral column. Cyralis CM is a cellulose-based chiral stationary phase (CSP) designed for enantiomeric separations, optical purity testing, chiral impurity analysis, and stereoisomer characterization in pharmaceutical, chemical, agrochemical, and fine chemical applications.

Fenvalerate can be retained and analyzed using the Cyralis CM stationary phase column. The analysis utilizes an isocratic method with a mobile phase consisting of Hexane and IPA. Detection is performed using UV.

Method Parameters

Mobile Phase	Hexane/IPA – 96/4%
Flow Rate	1.0 mL/min
Detection	UV 230 nm
Resolution	(1-2): 1.71, (2-3): 6.85, (3-4): 4.00
Class of Compounds	Insecticide
Analyzing Compounds	Fenvalerate

HPLC Column Used

Cyralis CM, 4.6 x 250 mm, 5 µm, 100 Å, dual ended

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