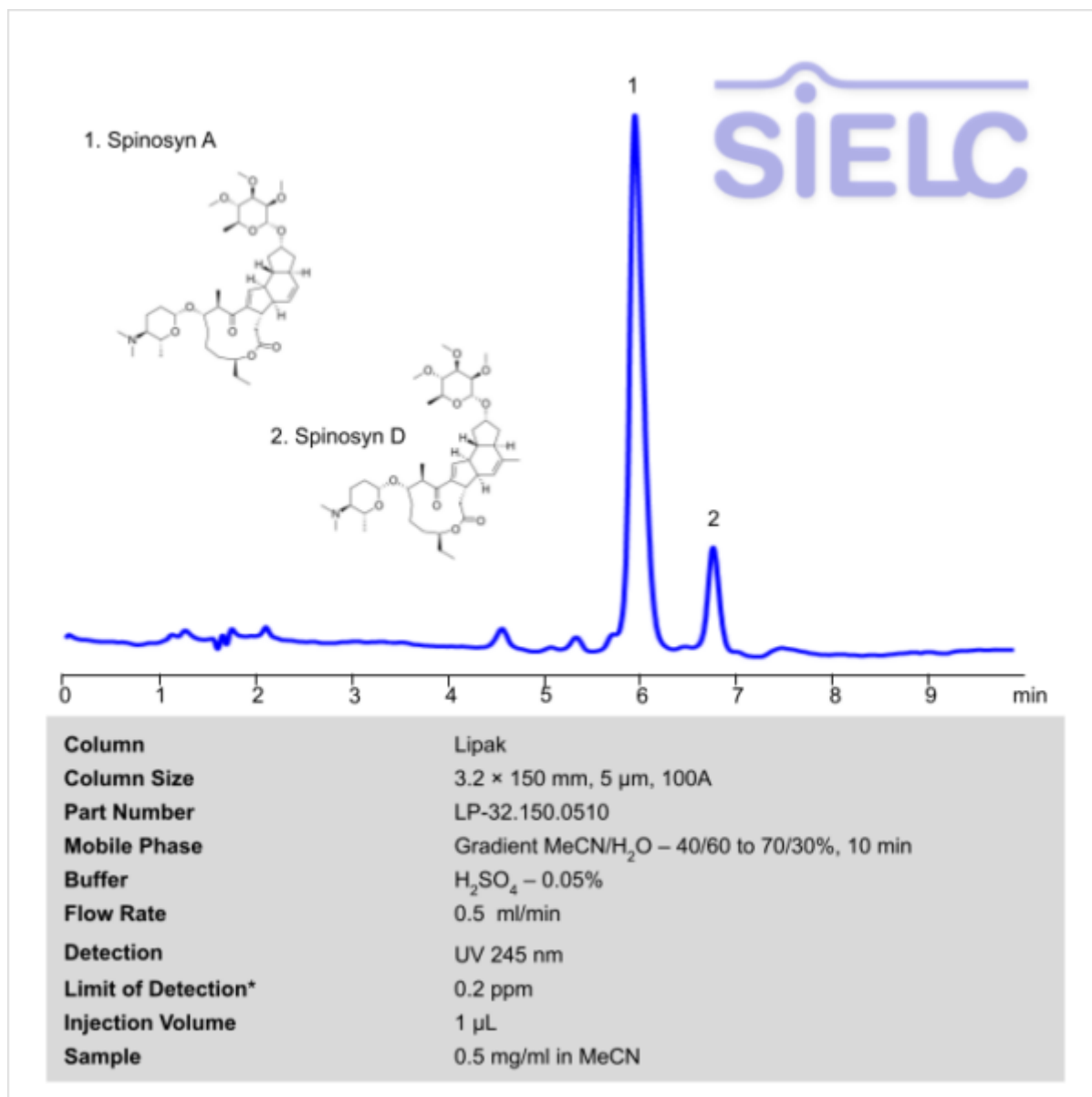


HPLC Method for Spinosyn A and D in Pesticide Formulation on Lipak Column

<https://sielc.com/hplc-analysis-of-spinosyn-a-d>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Spinosyn A , Spinosyn D

Spinosyn A and Spinosyn D are two parts of an insecticide called “Spinosad”. The insecticide works through both contact and ingestion by numerous insect species. Spinosyns and spinodoids target and bind to sites on nicotinic acetylcholine receptors, which disrupts neurotransmission and leads to the insects dying by hyperexcitation of the nervous system.

The sample was created by diluting a milliliter of commercial Spinosad solution in acetonitrile using a 10 mL volumetric flask and mixing at high speed until all unnecessary content separated from the needed solution.

Spinosyn A , Spinosyn D can be retained and analyzed using the Lipak stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	Gradient MeCN – 40-70%, 10 min
Buffer	H2SO4 – 0.05%
Flow Rate	0.5 ml/min
Detection	UV 245 nm
Limit of Detection*	0.2 ppm
Class of Compounds	Insecticide
Analyzing Compounds	Spinosyn A, Spinosyn D

HPLC Column Used

Lipak, 3.2 x 150 mm, 5 µm, 100 Å, dual ended

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