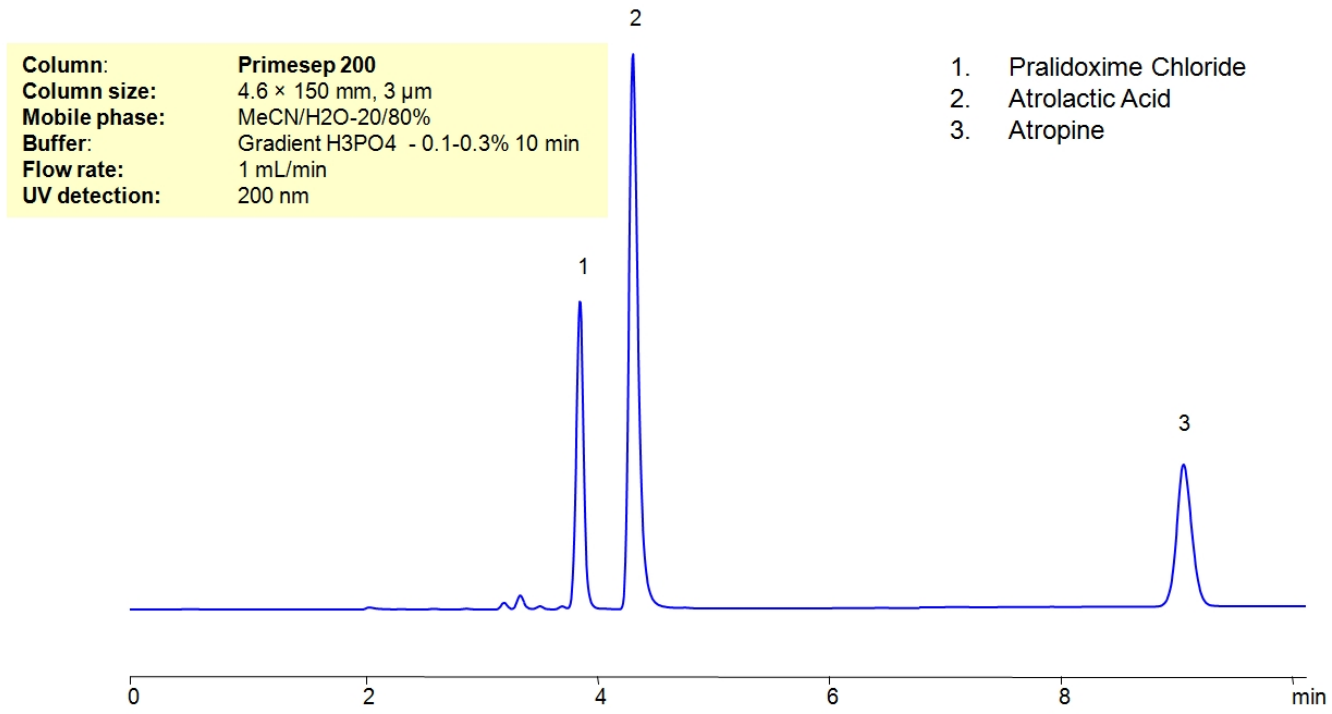
HPLC Separation of Mixture of Atropine, Atrolactic Acid and Pralidoxime Chloride

https://sielc.com/hplc-separation-of-mixture-of-atropine-atrolactic-acid-and-pralidoxime-chloride

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Atropine , Atrolactic Acid , Pralidoxime Chloride .

Atropine is a tropane alkaloid with the chemical formula C17H23NO3 . It is an anticholinergic medication that is used to treat nerve agent, pesticide poisoning, slow heartrate, and is also used to decrease saliva production. Typically, it is administered through injection.

Atrolactic Acid is a 2-hydroxy monocarboxylic acid with the chemical formula C 9 H 10 O 3 . It can cause irritation to eyes, skin, and the respiratory system.

Pralidoxime Chloride , also known as 2-PAM, is a cholinesterase reactivator with the chemical formula C 7 H 9 N 2 O + . It is used as an antidote for poisoning by organophosphate pesticides and nerve agents.

Atropine , Atrolactic Acid , Pralidoxime Chloride can be retained and analyzed using the Primesep 200 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	MeCN/H2O – 20/80%
Buffer	Gradient H3PO4 – 0.1-0.3%, 10 min
Flow Rate	1.0 ml/min
Detection	UV, 200 nm

Class of Compounds	Drug, Acid, Base, Hydrophilic, Hydrophobic, Ionizable, Vitamin, Supplements
Analyzing Compounds	Atropine,Atrolactic Acid,Pralidoxime Chloride

HPLC Column Used

Primesep 200, 4.6 x 150 mm, 3 µm, 100 A, dual ended

Order this column at hplc-shop.de →