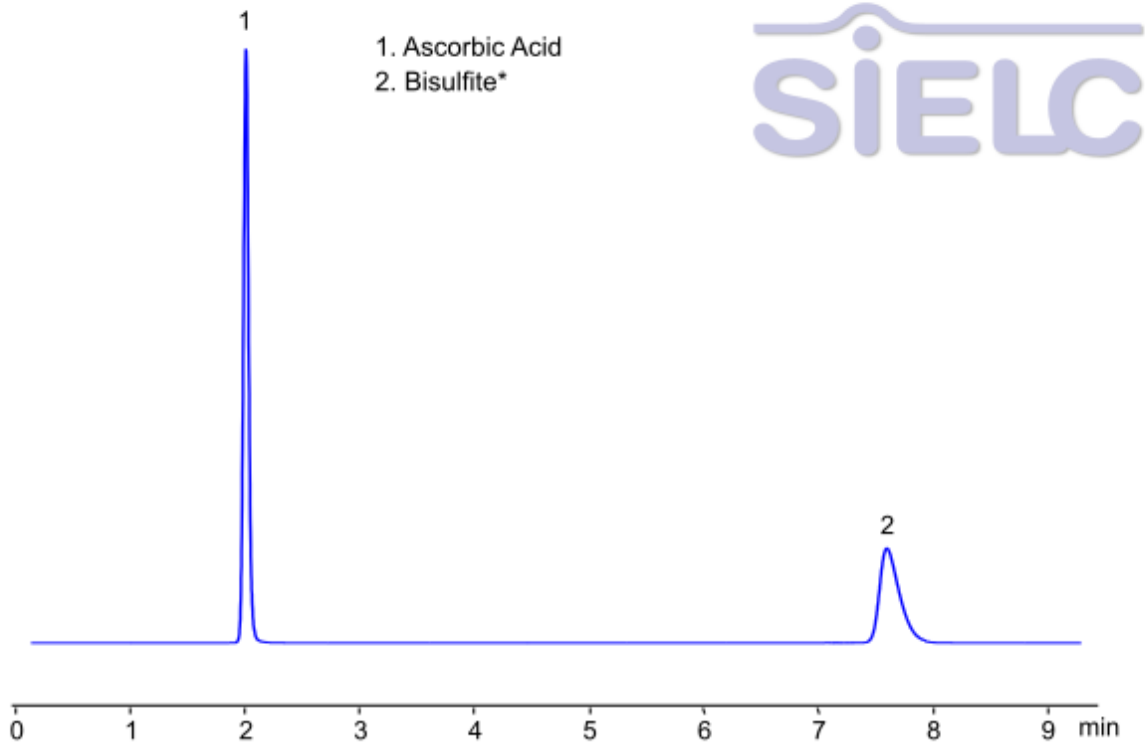
HPLC Isocratic Method for Analysis of Ascorbic Acid and Sodium Metabisulfite on Primesep SB Column

https://sielc.com/hplc-method-for-analysis-of-ascorbic-metabisulfite-iso

Chromatogram



Column:	Primesep SB
Column size:	4.6 × 150 mm, 5 µm
Column part number:	SB-46.150.0510.M
Mobile phase:	MeCN/H_2O - 50/50%
Buffer:	H_3PO_4 - 0.2%
Flow rate	1.0 mL/min
Detection:	UV 275 nm

Description

*The metabisulfite ion (S 2 O 5 2–) is hydrolyzed to bisulfite (HSO 3 –) in water. Sodium metabisulfite is a white crystalline or powder solid. It has many uses, but some of it's more prominent are: as the source of SO2 in wine, as a bleaching agent in the production of Coconut cream, and added to anesthetic solutions to prevent oxidation to improve the shelf life of the solution. Ascorbic is found naturally in citrus fruits and many vegetables. As a medication, it is used to prevent or treat low levels of vitamin C, since it is that vitamin. Vitamin C is needed to maintain the health of skin, cartilage, teeth, bone, and blood vessels. Ascorbic Acid and Sodium Metabisulfite can be separated, retained, and analyzed on a Primesep SB mixed-mode stationary

phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a phosphoric acid (H3PO4) buffer. This analysis method can be detected in the UV 270 nm.

Method Parameters

Mobile Phase	MeCN/H2O – 50/50%
Buffer	H3PO4 – 0.2%
Flow Rate	1.0 ml/min
Detection	UV, 275 nm
Class of Compounds	Acid, Hydrophilic, Ionizable, Disinfectant, Antioxidant, Preservative agent.
Analyzing Compounds	Ascorbic Acid,Sodium metabisulfite

HPLC Column Used

Primesep SB.M, 4.6 x 150 mm, 5 µm, 100 A, dual ended