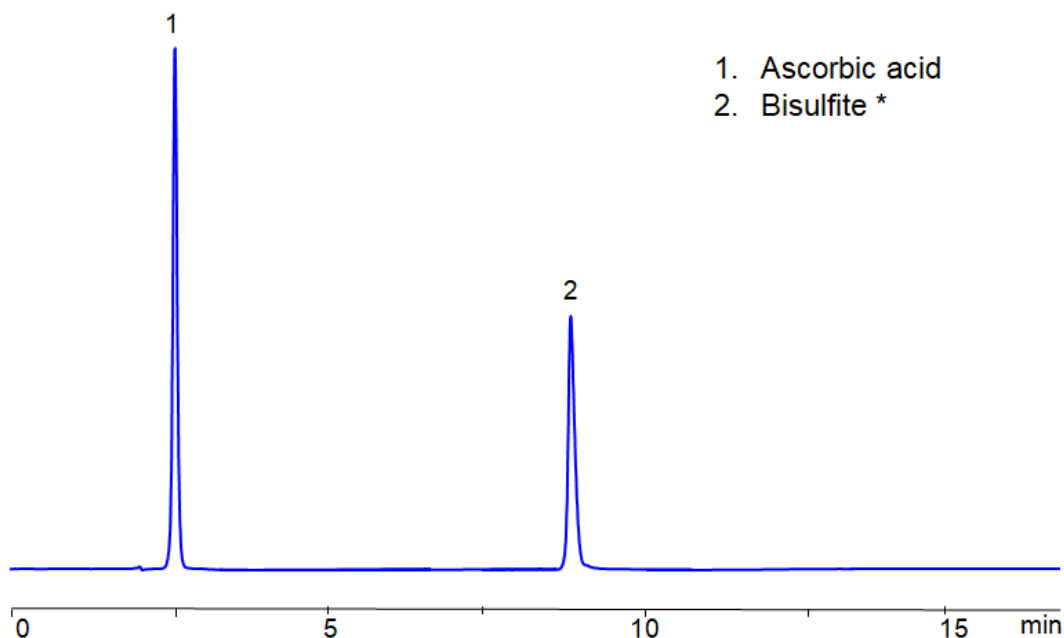


HPLC Method for Analysis of Ascorbic Acid and Sodium Metabisulfite on Primesep SB.M Column

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

Chromatogram



Column: PrimesepSB
Column part number: SB-46.150.0510.M
Size: 4.6 x 150 mm, 5 µm
Mobile phase: MeCN/H2O
Buffer: H3PO4
Flow rate: 1 mL/min
UV Detection: 270 nm

Time, min	%MeCN	%H2O	%H3PO4
0.00	10	90	0.2
5.00	50	50	0.5
10.00	50	50	0.5

Description

*The metabisulfite ion ($S_2O_5^{2-}$) is hydrolyzed to bisulfite (HSO_3^-) in water. Sodium metabisulfite is a white crystalline or powder solid. It has many uses, but some of its more prominent are: as the source of SO_2 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.M mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a phosphoric acid (H_3PO_4) buffer. This analysis method can be detected in the UV 270 nm.

Method Parameters

Mobile Phase	MeCN/H2O
Buffer	H3PO4
Flow Rate	1.0 ml/min

Detection	UV, 270 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