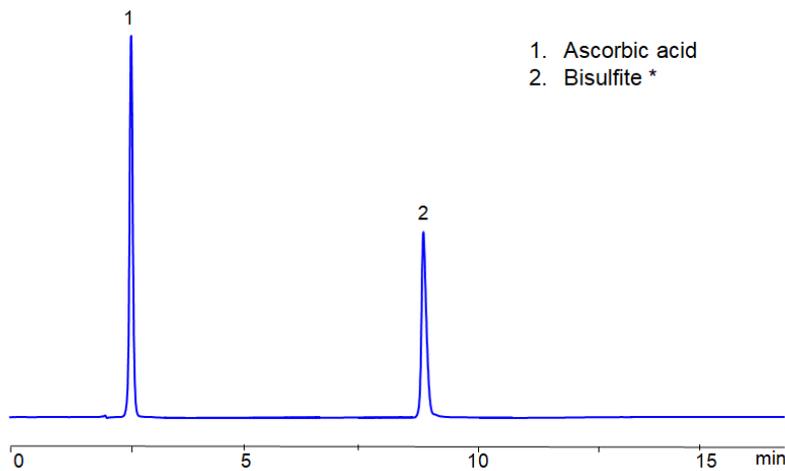


HPLC Method for Analysis of Ascorbic Acid and Sodium Metabisulfite on Primesep SB.M Column



Column: Primesep SB
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 | %H ₂ O | %H ₃ PO ₄ |
|-----------|-------|-------------------|---------------------------------|
| 0.00 | 10 | 90 | 0.2 |
| 5.00 | 50 | 50 | 0.5 |
| 10.00 | 50 | 50 | 0.5 |

*The metabisulfite ion (S₂O₅²⁻) is hydrolyzed to bisulfite (HSO₃⁻) 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 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.M 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

| | |
|---------------------|--|
| Column | Primesep SB.M, 4.6 x 150 mm, 5 µm, 100 Å, dual ended |
| Mobile Phase | MeCN/H ₂ O |
| Buffer | H ₃ PO ₄ |
| Flow Rate | 1.0 mL/min |
| Detection | UV, 270 nm |

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