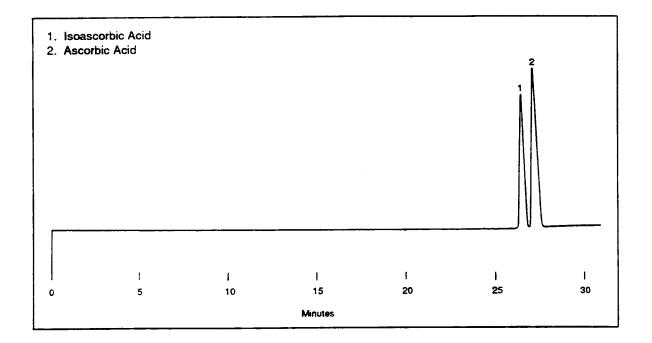


Ascorbic Acid (Vitamin C) and Isoascorbic Acid (Erythorbic Acid)

Application Note: 15

Ascorbic acid is a water-soluble vitamin with a wide natural distribution. Isoascorbic acid, its stereoisomer, has only 5% of the biological activity of ascorbic acid. Because of its similar redox potential, it is commonly used in preference to ascorbic acid as an antioxidant in foods. Capillary electrophoresis can be used to separate these two compounds.



Capillary:

50 cm x 50 μm, coated

Buffer:

0.1 M sodium phosphate, pH 5.7

Load conditions:

8 kV, 5 seconds

Run conditions:

8 kV, constant voltage, ⊖→⊕ polarity

Detection:

UV, 265 nm, 0.02 AUFS