

## **Kinetic Spectrophotometric Determination of Ascorbic Acid in Pharmaceutical Formulations**

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Sensitive, simple and fast kinetic spectrophotometric method for determination of ascorbic acid has been described. The procedure is based on reduction of iron(III) to iron(II) by ascorbic acid and formation of a complex between iron(II) and 2,2'-bipyridine. Reaction rate was monitored spectrophotometrically by measuring the increase in absorbance of the formed complex at 522 nm. Ascorbic acid was determined using a fixed-time (3 min) method in two concentration ranges: 0.1–15 mg mL<sup>-1</sup> and 20–45 mg mL<sup>-1</sup>; the corresponding correlation coefficients were 0.998 and 0.999, respectively. Relative standard deviation for 10 replicate determinations of ascorbic acid in 2 mg mL<sup>-1</sup> solution was 0.47% and detection limit equalled 0.032 µg mL<sup>-1</sup>. The proposed method was successfully applied to the determination of ascorbic acid in pharmaceutical formulations. Reliability of determination was confirmed applying standard iodimetric method.