Determination of Folic Acid and its Related Substances of the Ferrous Fumarate and Folic Acid Dispersible Tablet by HPLC

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SUMMARY. The aim of the present study was to establish a method for the determination of folic acid and related substances content in dispersible tablets. Method: A Shim-pack VP-ODS C_{18} reversed phase column (4.6 mm × 250 mm) was used. The mobile phase consisted of methanol-phosphate buffer (20:80) with a pH of 6.3.The flow rate was 1.0 mL/min, and the detection wavelength was 277nm and the column temperature was 30 °C. Results: The calibration curve was linear in the range of 5~150 µg/mL (r = 0.9998) for folic acid. The minimal detection limit was 99.08 %, n = 9 and the related substances were well separated. This method resulted to be convenient, accurate, selective and reliable, and can be applied for the quality control of folic acid.

KEY WORDS: Content determination, Folic acid and related substances, HPLC.

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