Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

Determination of Trace Amounts of Gold(III) using Ethopropazine Hydrochloride and Isothipendyl Hydrochloride: A Spectrophotometric Study

Mahaveer B. MELWANKI, Saraswati P. MASTI, Jaldappa SEETHARAMAPPA
Department of Chemistry, Karnatak University,
Dharwad-580 003, INDIA

Keywords Authors



chem@tubitak.gov.tr

Scientific Journals Home
Page

<u>Abstract:</u> Two simple, sensitive and accurate spectrophotometric methods have been proposed for the determination of micro amounts of gold (III) using ethopropazine hydrochloride (EPH) and isothipendyl hydrochloride (IPH). The methods are based on the oxidation of phenothiazines by gold (III) to give red radical cations having maximum absorption at 513 and at 512 nm with molar absorptivities of 2.0 X 10⁴ and 2.1 X 10⁴ I mol⁻¹ cm⁻¹ for EPH and IPH respectively. Beer's law is valid over the concentration range 0.5-14.1 mg I⁻¹ for EPH and 0.5-14.5 mg I⁻¹ for IPH. The proposed methods have been successfully applied for the determination of gold (III) in synthetic mixtures.

Turk. J. Chem., 26, (2002), 17-22.

Full text: pdf

Other articles published in the same issue: Turk. J. Chem., vol. 26, iss. 1.