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Liquid Anion Exchange Chromatographic Extraction And Separation Of Platinum (IV) With 4-(4-Methoxybenzylideneimino)-5-Methyl-4*H*-1,2,4-Triazole-3-Thiol In Malonate Medium

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ABSTRACT

A novel method is proposed for the extraction of microgram level concentration of platinum(IV) from malonate medium with 4-(4-methoxybenzylideneimino)-5-methyl-4H-1,2,4-triazole-3-thiol(MBIMTT) dissolved in chloroform as an extractant. The platinum (IV) from the organic phase is stripped with water and estimated spectrophotometrically with stannous chloride. The effect of acid, reagent concentration and various foreign ions has been investigated. The method affords the binary separation and determination of platinum (IV) from the alloys and synthetic mixture. The method is highly selective, simple and reproducible.

Keywords: Platinum (IV), solvent extraction, MBIMTT, Spectrophotometry.