

Determination of terbutaline sulfate and its degradation products in pharmaceutical formulations using LC. Daraghmeh, N.; Al-Omari, M. M.; Sara, Z.; Badwan, A. A.; Jaber, A. M. Y.. The Jordanian Pharmaceutical Manufacturing and Medical Equipment Co. Ltd, Naor, Jordan. Journal of Pharmaceutical and Biomedical Analysis (2002), 29(5), 927-937. Publisher: Elsevier Science B.V., CODEN: JPBADA ISSN: 0731-7085. Journal written in English. CAN 138:95727 AN 2002:498880 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

There is a lack of information concerning anal. of terbutaline sulfate and quantification of its related substances particularly in the liq. dosage forms. This work aimed at developing and validating an HPLC method for detn. of terbutaline sulfate and its possible degrdn. products, namely, 3,5-dihydroxybenzoic acid, 3,5-dihydroxybenzaldehyde and 1-(3,5-dihydroxyphenyl)-2-[(1,1-dimethylethyl) amino]-ethanone that might appear as impurities in the starting material as well as in the solid and liq. formulations. The chromatog. system used consisted a Hypersil 100 C18, 150×4.6 mm (5 μm) column, a mobile phase of ammonium acetate (0.15 M) and glacial acetic acid (pH of 4.0, 96:4 vol./vol.) with a flow rate of 2 mL min⁻¹ and a UV detector set at 270 nm. The degree of linearity and the characteristic statistical parameters of the calibration curves including the limit of detection (LOD) and limit of quantitation (LOQ) were estd. for terbutaline sulfate and its degrdn. products. The method was found to be specific, stability indicating, accurate, precise and robust.