

Abstract

Gas chromatography in drug analysis II.

Thesis

Klára Špalová

Charles University in Prague, Faculty of Pharmacy in Hradec Králové
Department of Pharmaceutical Chemistry and Drug Control

In this study, effect of various conditions on stability of 1,3-butanediol was studied.

During these studies, 1,3-butanediol was found as a rather stable compound, susceptible only to oxidation using oxidative agents- including air oxygen or UV radiation.

Various degradation products were detected during stress studies. There were peaks at retention times 6.0 and 6.9 at every chromatogram, which grew in time under some conditions. A new degradation product at retention time 3.0 was detected when UV radiation actuated on aqueous solution of 1,3-butanediol. The same peak was observed under oxidative conditions., Its concentration grew significantly in time.