

Abstract

High pressure liquid chromatography (HPLC) and Ultra-violet-Visible Spectroscopy (UV-VIS) were used to determine saccharin in some food. From the study, it was found that the parameters in analytical chemistry which obtained from the HPLC, UV and VIS (AOAC) were comparable i.e. R_f 5.02 min., λ_{max} 266 nm and 558 nm, the working range of calibration curve were 2-22, 10-100 and 6-12 ppm, the detection limit were 0.5, 30 and 6 ppm respectively, the accuracy (in term percentage recovery) were 72.7%, 75.7%, and 72.5% and the reproducibility were equally high all of them. The time required for UV was the shortest, but the cost per unit sample was the same. The effects of the interferences such as sodium benzoate, caffeine and glucose-fructose would resulted in the positive error of the analysis from the UV, but no effect was observed for the HPLC and VIS. And, We can be concluded that the HPLC and VIS techniques were suitable methods for the analysis of saccharin especially, where the samples contain preservative, caffeine and glucose-fructose. Seventy samples were analysed for saccharin. It was found that 73% of The total sample contains saccharin as sweetener. The amount of saccharin present in these samples were ranging from nil to 1029.6 ppm.