

ABSTRACT

Determination of Paracetamol and Codeine Phosphate simultaneously using the reversed phase High-Performance-Liquid-Chromatography (HPLC) have been performed. The mobile phase solution obtained can separate parasetamol from codeine phosphate with good resolution ($R_S = 2,704$), this mobile phase were a mixture of methanol and phosphate buffer 20 mM pH 2,5 (15:85). The condition of HPLC used were zorbax C8 column , temperature 27°C, flow rate 1,5 ml/minutes and detected by DAD ($\lambda = 284$ nm). Linierity of parasetamol and codeine phosphate were good (r paracetamol 0,9999 with $V_{xo} = 0,51$ % and r codeine phosphate 0,9999 with $V_{xo} = 1,22$ %). Precision instrument for paracetamol and codein phosphate were 0,77 % and 0,79 % respectively. Accuracy of the methods were in the range of accepted limits (98 – 102%), average recovery of paracetamol and codeine phosphate in the simulation matrix were 99,99 % and 100,5 % respectively. Precision methods of Parasetamol 0,64% and Codeine phosphat 0,75%. The concentration of paracetamol and codeine phosphate in sample tablet were 100,8% and 99,52% respectively, that are fulfill of USP XXIV requirement (90 – 110 %)

Keywords : HPLC, Paracetamol, Codeine phosphate, Optimization of Mobile Phase.