

ABSTRACT

Digital calorimetry is a very precise, informal to perform and cost-effective procedure to identify concentration of different chemical substances in form of colored solution. Marquis's reagent used for alprazolam color test which belong to benzodiazepine class of drug. Alprazolam develops orange color reacting with Marquis's reagent on heating for one minute at 100°C. Different concentrations were used of alprazolam which on reaction produced orange color of different intensities. In this study calorimetry performed by using color picker app. This app can be used by simply installing it in smartphones. This app works using RGB Software which uses RED, GREEN, BLUE color lights. These basic color lights intermix and give the color of solution under observation. Some other features also obtained such color code, RGB value of red, green and blue colors, hue, saturation and intensity of color. From RGB values, value of R^2 of transmittance and absorbance were calculated. R^2 value range from 0-1. The parameter whose value is 1 or closer to one is more accurate. R^2 values of readings taken by both the color picker app in mobile and spectrophotometer were compared, results show that both the instrument gives similar readings.