

Abstract

Easy, the accurate, sensitive spectrophotometric method used to determine Benzocaine in a pure and pharmaceutical preparation. The proposed method depends on using Promethazine hydrochloride as a reagent. Where it depends on oxidative coupling reaction of benzocaine by cerium ammonium sulphate with promethazine hydrochloride in the presence of hydrochloric acid to form green dye product, λ_{max} 615 nm. Beers law is obeyed in the concentration of (5 –300 $\mu\text{g ml}^{-1}$). The molar absorptivity is ($1.77 * 10^3$) $\text{L mol}^{-1} \text{cm}^{-1}$, a sandal sensitivity of (0.0098) $\mu\text{g cm}^{-2}$ and RSD ($\pm 0.56\%$). The method gave a successful determination for benzocaine in a pharmaceutical preparation. © 2018 Pharmascope Publications. All rights reserved.