

Abstract

The separation was conducted for guaifenesin by using octa decyl silane (ODS 3) a reversed phase -HPLC column. Which was maintained at ambient temperature. The mobile phase consists of triethylamine buffer (pH = 6.5) and acetonitrile (75/25 v/v) which was delivered at a rate of 1 mL /min. The analyte was detected using UV detector at the wavelength 225nm. The method is validated for its precision, limit of quantitation (LOQ) linearity and robustness. The method was found to be linear over the concentration range 30-70 $\mu\text{g}/\text{mL}$ ($r^2 = 0.999$). The retention time for guaifenesin was found to be 4.72 min. limit of quantitation of method is 10.98 $\mu\text{g}/\text{mL}$ and limit of detection 0.036 $\mu\text{g}/\text{mL}$.