

ABSTRACT

Validation of UV-Vis Spectrophotometric Method for the Determination of Sodium Lauryl Sulfate in the Tablets.

Salman Salim

Simple, accurate and precise UV-Vis spectrophotometric method was validated for the determination of sodium lauryl sulfate (SLS) in tablet. The method based on the formation of chloroform extractable colored compound. The colored compound is the result of ion pairing complex between SLS with 0.005% methylene blue in phosphate buffer of pH 7.2. Showing the maximum absorption of the complex substance at 652 nm. The proposed method showed good linearity ($r^2 = 0.9969$) in the range concentration of 2 ppm to 10 ppm. The precision was less than 5%, while accuracy of SLS was $(98.59 \pm 1,26)$ %. The proposed method is robust in pH variation of 0.2.

Keywords: Sodium Lauryl Sulfate, UV-Vis Spectrophotometry, Method Validation