Validation of a Spectrophotometric Method in the Visible Region for the Quantification of Kojic Acid in Raw Materials and Products

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SUMMARY. A spectrophotometric method in the visible region was developed and validated for the quantification of kojic acid (KA) in raw materials and products. According to the validation results, this method yields linearity in the range of 5 and 50 μg/mL of KA (r = 0.99998), selectivity, suitable sensitivity, precision (RSD 1.33 % and 1.21 % for intermediate precision and repeatability respectively), accuracy (recovery near 100 %) and robustness (varying pH, temperature and reading time) were measured and led to the validation of this method. These methods were tested and validated for various parameters according to ICH guidelines and USP.

KEY WORDS: Kojic acid, Ferric chloride, Spectrophotometry, Validation of an analytical method.

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