ISSN: 2278-1862



## Journal of Applicable Chemistry

2018, 7 (6): 1696-1702 (International Peer Reviewed Journal)



Visible Spectrophotometric Method for Determination of Lisinopril dihydrate and Enalaprilmaleate in Bulk and Pharmaceutical Formulations by DDQ/DMF/Dioxane

G. V.S.Sarma<sup>1</sup>\*, E. S. R. S.Sarma<sup>2</sup>, G. M. J.Raju<sup>1</sup> and K. Raghu Babu<sup>2</sup>

1. Department of Chemical Engineering, A.U.College of Engineering (A), Andhra University, Visakhapatnam, A.P, INDIA

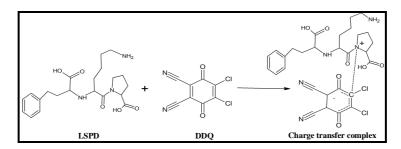
2. Department of Engineering Chemistry, A.U.College of Engineering (A), Andhra University, Visakhapatnam, A.P, INDIA
Email: gvssarma@gmail.com

Accepted on 28th October, 2018

## **ABSTRACT**

A simple and sensitive Spectrophotometric method for the determination of Lisinopril dihydrate and Enalapril maleate in bulk and in pharmaceutical formulations has been developed and validated. This method is based on the formation of colored product as a charge transfer complex when the drug reacts with DDQ and Dioxane. The optimum conditions of the reactions for the proposed method were studied and optimized. Results of the assay were statistically validated and recorded. The proposed method was applied successfully for the determination of lisinopril dihydrate and enalapril maleate in commercial dosage forms and no significant interference was observed from the excipients commonly used as pharmaceutical aids with the assay procedure. System suitability, specificity, linearity, accuracy and precision were performed.

## **Graphical Abstract**



**Keywords:** Lisinopril dihydrate, Enalapril maleate, DDQ (2,3-dichloro-5,6-dicyano-1,4-benzoquinone), DMF(n, n-dimethyl formamide), Dioxane, Visible spectrophotometer.