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Iodometric System for Determining Vitamin C using Cu (II)

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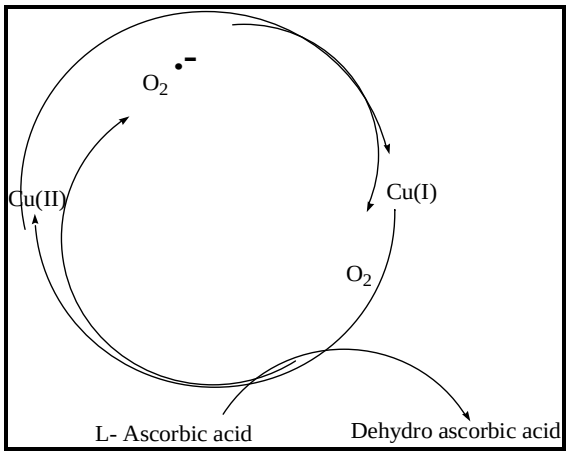
ABSTRACT

An easily understood method for the purpose of determining the molecular weight and amount of the ascorbic acid present in vitamin C supplements is marked out. The method include ascorbic acid undergoing oxidative dehydrogenation by copper in acidic medium, led by reaction of unreacted copper with potassium iodide through iodometry. The suggested method shows an improvement in iodometric titration and its applicability in the quantitative analysis of the ascorbic acid. The data in the results indicate that the oxidation of ascorbic acid proceeds by the reduction of Cu (II) to Cu (I). And hence, the mentioned titration method can be adopted for different samples of ascorbic acid to analyse them quantitatively as it shows advantage over the previous methods.

Graphical Abstract



Ascorbic acid undergoes oxidation by the reduction of Cu (II) to Cu (I).

.**Keywords:** Ascorbic acid, Vitamin C supplements, Iodometry, Copper (II).