An Investigation into the Content of Ethanoic Acid in Different Kinds of Vinegar Commonly Found on the Market

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Abstract

The content of ethanoic acid in three vinegar samples commonly sold in different markets in Yangon were collected and investigated. By the esterification method and volumetric analysis, it was found that the two vinegar solutions (A and B) contained ethanoic acid with the concentration of 2.4 M and 2.6 M respectively. These samples did not contain other strong acids. Only one of the samples (C) contained strong acid (sulphuric acid). By employing Atomic Absorption Spectrophotometric method, the sample (C) had $50\mu g/L(5x10^{-5}g/L)$ of lead. It may be inferred that the vinegar (C) is not suitable for using as food additives.

Keywords: Ethanoic acid, Esterification, Atomic Absorption Spectrophotometric method

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