CHAPTER 1

INTRODUCTION

Acetic acid has a place in the organic chemical industry that is comparable to sulphuric acid in the inorganic chemical industry. The most commonly known acetic acid is also known as methane carboxylic acid. Its IUPAC name is ethanoic acid. Its molecular formula is CH_3COOH and abbreviated as ACOH, with molecular weight of 60.05.

A clear, colorless liquid that has a piercingly sharp, pungent (vinegary odour) and is a dangerous vesicant. As the acid of vinegar, acetic acid is as ld as fermented liquors, which sour spontaneously and which are historically recorded prior to 3000BC.

It occurs both free and combined in the form of esters of various alcohols in many plants and has also been detected in animal secretions.

The term “acetic acid” have been introduced by Libavius (1540-1600AD), and the properties of icy (glacial) acetic acid and common vinegar were recognized. Many (attempts have been made to prepare icy acetic aid from repeated distillation of vinegar during these early studies), but it was normally prepared by dry distillation of copper acetate or similar heavy metals acetates like the production of sulphuric acid from its metallic salts.

Later, Lavoisier believed acetic acid made by dry distillation of salts can be distinguished from acetic acid, the hypothetical acid of vinegar. After his death, the identity of acetic and acetous acid was demonstrated by Adet and others. But, final proof was obtained, when Kolbe first prepared acetic acid in 1847.

Today, acetic aid is one of the most important industrial organic acids. It is produced mostly synthetically in volume exceeding a billion pounds per year.