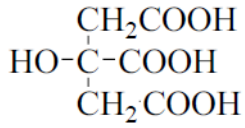
Citric acid



$C_6H_8O_7$ M.W: 192.1 M.P.: 153°C

Citric Acid should not contain C6H8O7 less than 99.5% and not more than 101% equivalent.

Sitrik Asit, %99.5'tan az ve %101 ekivalanından çok C6H8O7 içermemelidir.

Properties: White, crystalline powder, colorless crystals or granules

Solubility: Very soluble in water, good soluble in alcohol, soluble in ether.

Recognition Reaction: 1 g is dissolved in 10 ml of water. Shows strong acid character against litmus paper.

Oxalic Acid: 1 g of compound is dissolved in a mixture of 1 ml of water and 1 ml of ethanol (95%)R; add 0.2 ml of calcium chloride TS, stand for 1 hour, the solution remains clear.

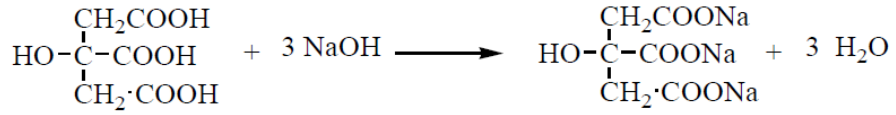
Sulfate limit test: 0.5 g citric acid is dissolved in 5 ml water. Add 2 ml of diluted HCl and make up to 45 ml with water. Add 5 ml of BaSO4 reagent and allow to stand for 5 minutes. The resulting turbidity is not more than the standard turbidity.

Standard turbidity: Mix 25 ml of 0.01 N H2SO4 and 2 ml of dilute HCl R and make up to 45 ml with water. Add 5 ml of BaSO4 R and mix for 5 minutes.

Quantity Determination:

0.5 g is dissolved in 50 ml of water. It is titrated with 1 N NaOH.in the presence of 0.5 ml phenolphthalein.

1ml 1N NaOH ……. 64.03 mg citric acid



Storage: Stored in tightly closed containers.

Reagents to be prepared:

CaCl2 TS: 10% w / v solution of calcium chloride hexanitrate in water.

Diluted HCl R: Take 26 ml HCl R and make up to 100 ml with distilled water.

$BaSO_4$ reagent: Mix 15 ml 0.5 M BaCl2, 55 ml water and 20 ml ethanol R. Take 5 ml of K2SO4 from 0.0181% w / v solution in water and make up to 100 ml with water.

0.01 N H2SO4: Take 0.24 ml of H2SO4 and make up to 1lt with distilled water.