

D. MONOGRAPHS

Acetic Acid

Content Acetic Acid contains 29.0 - 31.0% of acetic acid ($C_2H_4O_2 = 60.05$).

Description Acetic Acid is a colorless and clear liquid having a characteristic pungent odor and an acid taste.

Identification (1) Acetic Acid is acidic.

(2) Acetic Acid responds to all tests for Acetate as described in the Qualitative Tests.

Purity (1) Heavy metals Not more than 10 $\mu\text{g/g}$ as Pb (3.0 g, Method 1, Control solution Lead Standard Solution 3.0 ml).

(2) Arsenic Not more than 4.0 $\mu\text{g/g}$ as As_2O_3 (0.50g, Method 1, Apparatus B).

(3) Readily oxidizable substances Measure 20 ml of Acetic Acid, and add 0.30 ml of 0.02 mol/l potassium permanganate. The pink color of the solution does not disappear within 30 minutes.

(4) Residue on evaporation Not more than 0.010%.

Weigh 20.0 g of Acetic Acid, evaporate, and dry at 100 for 2 hours, and weigh the residue.

Assay Weigh accurately about 3 g of Acetic Acid, and add 15 ml of water. Titrate with 1 mol/l sodium hydroxide (indicator: 2 drops of phenolphthalein TS).

1 ml of 1 mol/l sodium hydroxide = 60.05 mg of $C_2H_4O_2$