



### Indian Standard IS 695 : 2020 - Acetic Acid

Acetic acid, is systematically named ethanoic acid, a valid IUPAC name is a colourless liquid organic compound with the chemical formula **CH<sub>3</sub>COOH**. When undiluted, it is called glacial acetic acid. The “Acetic” in the name acetic acid is derived from acetum, the Latin word “for vinegar”. Acetic acid is being used in pharmaceutical, textile, for several key petrochemical intermediates and products including vinyl acetate monomer, acetate esters, cellulose acetate, acetic anhydride, monochloroacetic acid etc., purified terephthalic acid, butyl and ethyl acetates.

The Indian Standard **IS 695: 2020** specifies requirements for the three different grades of Acetic Acid namely (i) Technical, (ii) pure and (iii) Analytical grade. The requirement of Pure & Analytical grade Acetic acid as specified in the standard are Solubility in water, Relative density at 27/27 °C, Colour, **Acetic acid content**, Crystallizing point, **Residue on evaporation, Chloride (as Cl), Iron (as Fe) Sulphate Heavy metals [(including iron) Formic acid (HCOOH), Acetaldehyde, Oxidizable impurities Water content** is with the stringent limits for the application in pharmaceutical industry / food industry. Also, an additional requirement of **Arsenic** has been specified in IS 695 to control the impurities in the pharmaceutical products.

The packaging of the product is specified as agreed between the manufacturer and purchaser and shall be subject to the provisions of law in force in the country for the time being. Each container shall bear the details of manufacturers’ name, grade of the material, Tare, gross and net mass and Year of manufacture.

The Department of Chemicals and Petrochemicals - Quality Control Order (QCO) mandates that acetic acid manufactured or imported, sold in India required to be comply with IS 695 and under valid licence from Bureau of Indian Standards to display the BIS Standard Mark, ensuring health / safety of consumers when various products are manufactured using acetic acid as a raw material