## **ETHYL ACETATE**

Prepared at the 46th JECFA (1996), published in FNP 52 Add 4 (1996) superseding specifications prepared at the 11th JECFA (1967), published in NMRS 44B (1969) and in FNP 52 (1992). An ADI of 0-25 mg/kg bw was established at the 11th JECFA (1967)

**SYNONYMS** Acetic acid ethyl ester, ethyl ethanoate

**DEFINITION** 

Chemical names Ethyl acetate

C.A.S. number 141-78-6

Chemical formula  $C_4H_8O_2$ 

Structural formula

H<sub>3</sub>C O CH<sub>3</sub>

Formula weight 88.11

Assay Not less than 99.0%

**DESCRIPTION** Colourless, transparent liquid having a fruity odour

**FUNCTIONAL USES** Carrier solvent, flavouring agent (see Volume 5)

**CHARACTERISTICS** 

**IDENTIFICATION** 

Refractive index (Vol. 4) n (20, D): 1.371-1.376

Specific gravity (Vol. 4) d (25, 25): 0.894-0.901

Acid value (Vol. 4) Not more than 5.0

Boiling point (Vol. 4) 77°

METHOD OF ASSAY

Transfer about 1.5 g, accurately weighed in a tared stoppered weighing bottle, to a suitable flask, add 50.0 ml of 0.5N sodium hydroxide, and reflux on a steam bath for 1 h. Allow to cool, add phenolphthalein TS and titrate the excess sodium hydroxide with 0.5N hydrochloric acid. Perform a blank determination, and make any necessary correction. Each ml of 0.5N sodium hydroxide is equivalent to 44.06 mg of  $C_4H_8O_2$ .