

ISOAMYL ACETATE

Prepared at the 49th JECFA (1997) , published in FNP 52 Add 5 (1997) superseding specifications prepared at the 46th JECFA (1996), published in FNP 52 Add 4 (1996) . Metals and arsenic specifications revised at the 63rd JECFA (2004). An ADI of 0-3 mg/kg bw was established at the 23rd JECFA (1979)

SYNONYMS Amyl acetate, isoamyl ethanoate

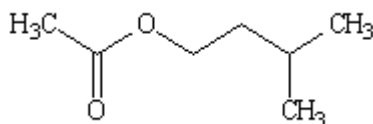
DEFINITION A mixture of acetic acid esters of pentanols

Chemical name 3-Methylbutyl ethanoate (principal component)

C.A.S. number 123-92-2

Chemical formula $C_7H_{14}O_2$

Structural formula



Molecular weight 130.19

Assay Not less than 95.0% $C_7H_{14}O_2$

DESCRIPTION Colourless, clear liquid, having a characteristic fruit-like odour

FUNCTIONAL USES Carrier solvent, flavouring agent (see “flavouring agents” monograph JECFA no. 43))

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Slightly soluble in water, insoluble in glycerol, practically insoluble in propylene glycol, soluble in ethanol, diethyl ether, ethyl acetate, most fixed oils and mineral oils

Refractive index (Vol. 4) $n(20,D)$: 1.400-1.404

Specific gravity (Vol. 4) $d(25,25)$: 0.868-0.878

PURITY

Acid value (Vol. 4) Not more than 1

Non volatile residue (Vol. 4) Not more than 7 mg/100 ml

Distillation range (Vol. 4) Not less than 99% v/v distils between 135 and 143°

Lead (Vol. 4)

Not more than 2 mg/kg

Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in Volume 4, "Instrumental Methods."

**METHOD OF
ASSAY**

Weigh accurately about 0.8 g of the sample and proceed as directed under *Ester Determination* (see Volume 4), using 65.10 as the equivalence factor (e) in the calculation.