

BUTAN-2-OL

Prepared at the 25th JECFA (1981), published in FNP 19 (1981) and in FNP 52 (1992). Metals and arsenic specifications revised at the 63rd JECFA (2004). No ADI was allocated at the 23rd JECFA (1979)

SYNONYMS Secondary butyl alcohol, 2-hydroxybutane

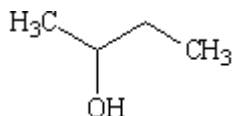
DEFINITION

Chemical names 2-Butanol, butan-2-ol

C.A.S. number 78-92-2

Chemical formula $C_4H_{10}O$

Structural formula



Formula weight 74.12

DESCRIPTION Colourless, clear, slightly viscous, flammable liquid, with a characteristic odour

FUNCTIONAL USES Extraction solvent, flavouring agent (see Volume 5)

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Freely soluble in water; miscible with ethanol and ether

Specific gravity (Vol. 4) 0.806 - 0.809

PURITY

Distillation range (Vol. 4) 98.5 - 100.5°

Non-volatile residue (Vol. 4) Not more than 2 mg/100 ml

Water (Vol. 4) Not more than 0.2% w/w (Karl Fischer Method)

Acidity Not more than 0.003% w/w (as acetic acid)
To 60 g of the sample add a few drops of phenolphthalein TS, and titrate with 0.1 N ethanolic potassium hydroxide to a pink end-point which persists for at least 15 sec. Not more than 0.3 ml is required.

Aldehyde and ketone Not more than 0.3% w/w (as butanal)
Proceed as directed under *Aldehyde and Ketone Determination* in Volume 4 using 10 g of the sample and 36.06 as the equivalence factor (e) in the calculation.

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."