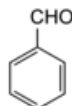




Edition: BP 2025 (Ph. Eur. 11.6 update)

Benzaldehyde

[General Notices](#)



C₇H₆O 106.1 100-52-7

Action and use

Flavour.

DEFINITION

Benzaldehyde contains not less than 98.0% w/w and not more than 100.5% w/w of C₇H₆O.

CHARACTERISTICS

A clear, colourless liquid.

Slightly soluble in [water](#); miscible with [ethanol \(96%\)](#) and with [ether](#).

TESTS

[Refractive index](#)

1.544 to 1.546, [Appendix V E](#).

[Weight per mL](#)

1.043 to 1.049 g, [Appendix V G](#).

Free acid

Not more than 1.0% w/v, calculated as benzoic acid, C₇H₆O₂, when determined by the following method. To 10 mL add 20 mL of [ethanol \(96%\)](#) previously neutralised to [phenolphthalein solution R1](#) and titrate with [0.1M sodium hydroxide VS](#) using [phenolphthalein solution R1](#) as indicator. Each mL of [0.1M sodium hydroxide VS](#) is equivalent to 12.21 mg of C₇H₆O₂.

Chlorinated compounds

Not more than 0.05% w/v, calculated as Cl, when determined by the following method. To 5 mL add 50 mL of [isoamyl alcohol](#) and 3 g of *sodium* and boil under a reflux condenser for 1 hour. Cool, add 50 mL of [water](#) and 15 mL of [nitric acid](#), cool, add 5 mL of [0.1M silver nitrate VS](#), shake and titrate the excess silver nitrate with [0.1M ammonium thiocyanate VS](#) using [ammonium iron\(III\) sulfate solution R2](#) as indicator. Repeat the procedure without the substance being examined. The difference between the titrations represents the amount of silver nitrate required. Each mL of [0.1M silver nitrate VS](#) is equivalent to 3.545 mg of Cl.

ASSAY

Carry out the method for [determination of aldehydes, Appendix X K](#), using 0.5 g. Each mL of 0.5M [potassium hydroxide in ethanol \(60%\) VS](#) is equivalent to 53.06 mg of C₇H₆O.

STORAGE

Benzaldehyde should be kept in a well-filled container, protected from light and stored at a temperature not exceeding 15°.