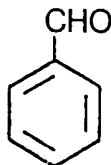


D. MONOGRAPHS

Benzaldehyde



C₇H₆O

Mol. Wt. 106.12

Benzaldehyde

[100-52-7]

Content Benzaldehyde contains not less than 97.0% of benzaldehyde (C₇H₆O).

Description Benzaldehyde is a colorless liquid having an almond-like odor.

Identification (1) To 3 drops of Benzaldehyde, add 0.1 g of phenol and 2 ml of sulfuric acid, and shake. A dark red color develops, and the mixture partly forms resinous lumps. Dilute 3 drops of this solution with 5 ml of water, and make alkaline with sodium hydroxide solution (1 25). A purple color develops.

(2) To 1 ml of Benzaldehyde, add 3 ml of sodium bisulfite TS, and shake. The mixture evolves heat immediately and forms crystalline lumps. Add 5 ml of water to this mixture. The crystalline lumps are dissolved.

Purity (1) Refractive index n_D^{20} : 1.544 - 1.547.

(2) Specific gravity 1.044 - 1.049.

(3) Acid value Not more than 5.0 (Flavoring Substances Tests).

(4) Halogenated compounds Proceed as directed under Halogenated Compounds in the Flavoring Substances Tests.

Assay Weigh accurately about 0.8 g of Benzaldehyde, and proceed as directed under Method 2 in Aldehyde and Ketone Content in the Flavoring Substances Tests. In the test, allow the mixture to stand for 10 minutes before titrating.

1 ml of 0.5 mol/l hydrochloric acid = 53.06 mg of C₇H₆O