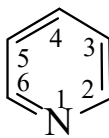




>>Entry Name: Pyridine, 9CI, 8CI

ENTRY UNDER REVIEW

Synonym(s): Azabenzene. Azine. FEMA 2966



CAS Registry Number: 110-86-1

Related CAS Registry Numbers(s): 7291-22-7 16969-45-2

Molecular Formula: C₅H₅N

Molecular Weight: 79.101

Accurate Mass: 79.042199

Percentage Composition: C 75.92%; H 6.37%; N 17.71%

Biological Source: Extracted in quantity from coal tar. Found in traces in some plants, e.g. *Nicotiana paniculata*, *Atropa belladonna* (Solanaceae)

Use/Importance: Powerful solvent; dissolves inorg. salts. Org. intermed. Solvent in Karl Fischer reagent for detn. of H₂O, denaturant for industrial ethanol. Important analytical solvent; often used in separation and detn. of elements

Physical Description: Liq. with characteristic unpleasant odour and a sharp taste

Melting Point: Fp -42°

Boiling Point: Bp 115.5°

Solubility: Misc. H₂O, petrol, Et₂O, etc.

Density: d₄²⁵ 0.978

pKa Value: pK_a 5.58 (25°) pK_a 5.23 (25°)

Refractive Index: n_D²¹ 1.5092

Other Data: Forms azeotropic mixt. with 3 mols. H₂O, Bp 92-3°. Hygroscopic. Steam-volatile

Hazard & Toxicity: Flammable, fl. p. 17°, autoignition temp. 482°. Eye and skin irritant. May cause dermatitis. CNS depressant by inhalation; symptoms include headache, vertigo, insomnia, nausea. Prolonged or repeated exposure injures kidney and liver. LD₅₀ (rat, orl) 891 mg/kg. LD₅₀ (rbt, skn) 1121 mg/kg. OES: long-term 5 ppm; short-term 10 ppm

Aldrich: P5750-6

Fluka: 82700

Sigma: P4036

Supelco: R80-1040

>>Derivative: Hydrochloride

Synonym(s): Pyridinium chloride

CAS Registry Number: 628-13-7

Molecular Formula: C₅H₆ClN

Molecular Weight: 115.562

Accurate Mass: 115.018876

Percentage Composition: C 51.97%; H 5.23%; Cl 30.68%; N 12.12%

Physical Description: Hygroscopic cryst. (EtOH)

Melting Point: Mp 82°

Boiling Point: Bp 218-219°

Aldrich: 24308-6

Fluka: 82800

Sigma: P7781

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 58888-58-7

Melting Point: Mp 46°