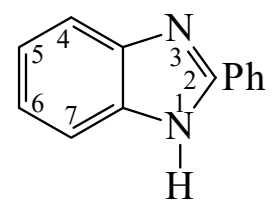




>>Entry Name: 2-Phenylbenzimidazole, 9CI



CAS Registry Number: 716-79-0

Molecular Formula: $C_{13}H_{10}N_2$

Molecular Weight: 194.235

Accurate Mass: 194.084398

Percentage Composition: C 80.39%; H 5.19%; N 14.42%

Use/Importance: Fungicide

Physical Description: Plates (AcOH), needles (H₂O)

Melting Point: Mp 296-297.5°

Solubility: Spar. sol. H₂O

pKa Value: pK_{a1} 11.91 (25°)

Other Data: Forms Ag and Hg derivatives

Hazard & Toxicity: LD₅₀ (mus, ipr) 167 mg/kg

Aldrich: P1980-9

>>Derivative: N-Me

Synonym(s): 1-Methyl-2-phenyl-1H-benzimidazole

CAS Registry Number: 2622-63-1

Molecular Formula: $C_{14}H_{12}N_2$

Molecular Weight: 208.262

Accurate Mass: 208.100048

Percentage Composition: C 80.74%; H 5.81%; N 13.45%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 170-171°

>>Derivative: N-Ph

Synonym(s): 1,2-Diphenylbenzimidazole

CAS Registry Number: 2622-67-5

Molecular Formula: $C_{19}H_{14}N_2$

Molecular Weight: 270.333

Accurate Mass: 270.115698

Percentage Composition: C 84.42%; H 5.22%; N 10.36%

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 112-113°

>>Derivative: N-Ph; hydrochloride

Physical Description: Needles

Melting Point: Mp 260°

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