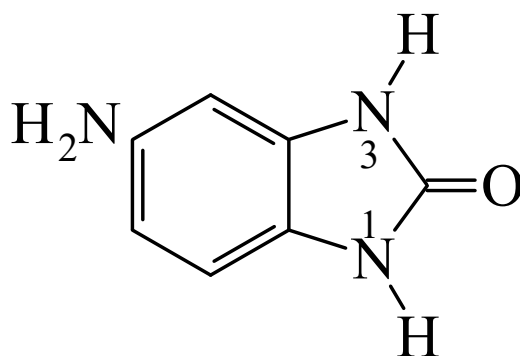




>>Entry Name: 5-Amino-2-benzimidazolinone

Synonym(s): 5-Amino-1,3-dihydro-2H-benzimidazol-2-one, 9CI



CAS Registry Number: 95-23-8

Related CAS Registry Numbers(s): 110274-75-4

Molecular Formula: $C_7H_7N_3O$

Molecular Weight: 149.152

Accurate Mass: 149.058912

Percentage Composition: C 56.37%; H 4.73%; N 28.17%; O 10.73%

>>Derivative: Hydrochloride

Physical Description: Cryst. (EtOH/Et₂O)

Melting Point: Mp 340°

>>Derivative: 1-Me

Synonym(s): 5-Amino-1,3-dihydro-1-methyl-2H-benzimidazol-2-one, 9CI

CAS Registry Number: 54732-89-7

Molecular Formula: $C_8H_9N_3O$

Molecular Weight: 163.179

Accurate Mass: 163.074562

Percentage Composition: C 58.89%; H 5.56%; N 25.75%; O 9.80%

Physical Description: Cryst. (as hydrochloride)

Melting Point: Mp 320-330° (as hydrochloride)

>>Derivative: 3-Me

Synonym(s): 6-Amino-1,3-dihydro-1-methyl-2H-benzimidazol-2-one, 9CI

CAS Registry Number: 73778-92-4

Molecular Formula: $C_8H_9N_3O$

Molecular Weight: 163.179

Accurate Mass: 163.074562

Percentage Composition: C 58.89%; H 5.56%; N 25.75%; O 9.80%

Physical Description: Cryst. (as hydrochloride)

Melting Point: Mp 348° (as hydrochloride)

>>Derivative: 1,3-Di-Me

Synonym(s): 5-Amino-1,3-dihydro-1,3-dimethyl-2H-benzimidazol-2-one, 9CI

CAS Registry Number: 53439-88-6

Molecular Formula: $C_9H_{11}N_3O$

Molecular Weight: 177.205

Accurate Mass: 177.090212

Percentage Composition: C 61.00%; H 6.26%; N 23.71%; O 9.03%

Physical Description: Cryst. (MeOH/Et₂O) (as hydrochloride)

Melting Point: Mp 310° (as hydrochloride)

References:

Van Romburgh, P. *et al.*, *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1930, **49**, 165, (*synth, derivs*)

Clark, R.C. *et al.*, *J.A.C.S.*, 1958, **80**, 1657, (*synth*)

Abdelaal, S.M. *et al.*, *J. Het. Chem.*, 1992, **29**, 1069, (*synth, cmr, deriv*)