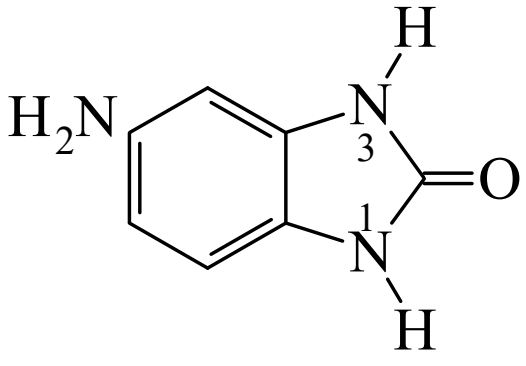
>>**Entry Name: 5-Amino-2-benzimidazolinone**
Synonym(s): 5-Amino-1,3-dihydro-2*H*-benzimidazol-2-one, 9CI



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. ($EtOH/Et_2O$)
Melting Point: Mp 340°

>>**Derivative:** 1-Me
Synonym(s): 5-Amino-1,3-dihydro-1-methyl-2*H*-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-2*H*-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-2*H*-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. ($MeOH/Et_2O$) (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)*