>>**Entry Name: 5-Amino-3-phenylisoxazole**
Synonym(s): 3-Phenyl-5-isoxazolamine

CAS Registry Number: 4369-55-5

Molecular Formula: $C_9H_8N_2O$
Molecular Weight: 160.175
Accurate Mass: 160.063663
Percentage Composition: C 67.49%; H 5.03%; N 17.49%; O 9.99%
Physical Description: Cryst.
Melting Point: Mp 110-112°

>>**Derivative:** *N*-Formyl

CAS Registry Number: 86685-13-4
Molecular Formula: $C_{10}H_8N_2O_2$
Molecular Weight: 188.185
Accurate Mass: 188.058578
Percentage Composition: C 63.83%; H 4.28%; N 14.89%; O 17.00%
Physical Description: Cryst. + ½ H_2O (H_2O)
Melting Point: Mp 115-117° (112°)

>>**Derivative:** *N*-Ac

CAS Registry Number: 31301-40-3
Molecular Formula: $C_{11}H_{10}N_2O_2$
Molecular Weight: 202.212
Accurate Mass: 202.074228
Percentage Composition: C 65.34%; H 4.98%; N 13.85%; O 15.82%
Physical Description: Cryst.
Melting Point: Mp 163-164°

>>**Derivative:** *N*-Me

CAS Registry Number: 86685-14-5
Molecular Formula: $C_{10}H_{10}N_2O$
Molecular Weight: 174.202
Accurate Mass: 174.079313
Percentage Composition: C 68.95%; H 5.79%; N 16.08%; O 9.18%
Physical Description: Cryst. (C_6H_6)
Melting Point: Mp 110-112°

>>**Derivative:** *N*-Et

CAS Registry Number: 86685-93-0
Molecular Formula: $C_{11}H_{12}N_2O$
Molecular Weight: 188.229
Accurate Mass: 188.094963
Percentage Composition: C 70.19%; H 6.43%; N 14.88%; O 8.50%
Physical Description: Cryst. (hexane/toluene)
Melting Point: Mp 115-116°

>>**Derivative:** *N*-Ph

CAS Registry Number: 15055-49-9
Molecular Formula: $C_{15}H_{12}N_2O$
Molecular Weight: 236.273
Accurate Mass: 236.094963
Percentage Composition: C 76.25%; H 5.12%; N 11.86%; O 6.77%
Physical Description: Cryst. (MeOH)
Melting Point: Mp 143-144° (131-133°)

References:

Boulton, A.J. *et al.*, *Tetrahedron*, 1961, **17**, 51, *(ir, uv, struct)*
Iwai, I. *et al.*, *Chem. Pharm. Bull.*, 1966, **14**, 1277, *(synth, pmr)*
Griss, G. *et al.*, *Annalen*, 1970, **738**, 60, *(synth)*
Tatee, T. *et al.*, *Chem. Pharm. Bull.*, 1986, **34**, 1643, *(derivs)*