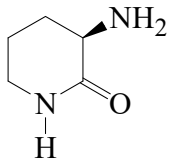
>>**Entry Name: 3-Amino-2-piperidinone,** 9CI
Synonym(s): Ornithine lactam



(*R*)-*form*

CAS Registry Number: 1892-22-4
Related CAS Registry Numbers(s): 7438-77-9

Molecular Formula: $C_5H_{10}N_2O$
Molecular Weight: 114.147
Accurate Mass: 114.079313
Percentage Composition: C 52.61%; H 8.83%; N 24.54%; O 14.02%

>>**Variant:** (*R*)-form

CAS Registry Number: 88763-76-2
Molecular Formula: $C_5H_{10}N_2O$
Molecular Weight: 114.147
Accurate Mass: 114.079313
Percentage Composition: C 52.61%; H 8.83%; N 24.54%; O 14.02%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 85.5-87.5°

>>**Derivative:** *N*-*tert*-Butyloxycarbonyl

CAS Registry Number: 221874-51-7
Molecular Formula: $C_{10}H_{18}N_2O_3$
Molecular Weight: 214.264
Accurate Mass: 214.131743
Percentage Composition: C 56.06%; H 8.47%; N 13.07%; O 22.40%
Physical Description: Oil
Optical Rotation: $[\alpha]_D^{24}$ –57.4 (c, 1.07 in $CHCl_3$)

>>**Derivative:** *N*-Hydroxy; hydrochloride

CAS Registry Number: 37524-32-6
Physical Description: Cryst. (MeOH/EtOH)
Melting Point: Mp 208-215 dec.°
Optical Rotation: $[\alpha]_D^{24}$ –0.8 (c, 0.83 in H_2O)

>>**Variant:** (*S*)-form

Molecular Formula: $C_5H_{10}N_2O$
Molecular Weight: 114.147
Accurate Mass: 114.079313
Percentage Composition: C 52.61%; H 8.83%; N 24.54%; O 14.02%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 86-87°. Mp 42°
Optical Rotation: $[\alpha]_D^{25}$ –12.4 (c, 3.44 in $CHCl_3$). $[\alpha]_D^{25}$ –19.9 (dioxan)

>>**Derivative:** Hydrochloride

CAS Registry Number: 42538-31-8
Melting Point: Mp 218-220 dec.°

>>**Derivative:** N^3-Benzoyl

Molecular Formula: $C_{12}H_{14}N_2O_2$
Molecular Weight: 218.255
Accurate Mass: 218.105528
Percentage Composition: C 66.04%; H 6.47%; N 12.84%; O 14.66%
Melting Point: Mp 170-172°