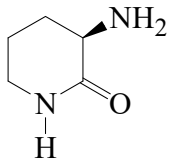
>>**Entry Name: 3-Amino-2-piperidinone,** 9CI
**Synonym(s):** Ornithine lactam



(*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°