



Molecular Formula: $C_{12}H_{16}N_2O_3$
Molecular Weight: 236.27
Accurate Mass: 236.116093
Percentage Composition: C 61.00%; H 6.83%; N 11.86%; O 20.31%
Biological Source: Constit. of the seeds of *Vicia pseudo-orobus*
Physical Description: Cryst. (H₂O)
Melting Point: Mp 205-213 dec.°
Optical Rotation: $[\alpha]_D^{20} +22.1$ (c, 1 in 3M HCl)

>> **Derivative:** N^2, N^5 -Dibenzoyl
Synonym(s): Ornithuric acid

CAS Registry Number: 495-46-5
Molecular Formula: $C_{19}H_{20}N_2O_4$
Molecular Weight: 340.378
Accurate Mass: 340.142308
Percentage Composition: C 67.05%; H 5.92%; N 8.23%; O 18.80%
Physical Description: Needles or plates (EtOH)
Melting Point: Mp 188-189°
Optical Rotation: $[\alpha]_D^{20} +8.5$ (EtOH aq.). $[\alpha]_D^{25} +24$ (c, 1 in 5M HCl)
Solubility: Spar. sol. H₂O, EtOAc, hot EtOH; insol. Et₂O

>> **Derivative:** N^2, N^5 -Dibenzoyl, Me ester

CAS Registry Number: 70548-49-1
Molecular Formula: $C_{20}H_{22}N_2O_4$
Molecular Weight: 354.405
Accurate Mass: 354.157958
Percentage Composition: C 67.78%; H 6.26%; N 7.90%; O 18.06%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 148-150° (145.6°)
Optical Rotation: $[\alpha]_D^{17} -13.2$ (c, 1.4 in MeOH)

>> **Derivative:** N^2, N^5 -Dibenzoyl, Et ester

Molecular Formula: $C_{21}H_{24}N_2O_4$
Molecular Weight: 368.432
Accurate Mass: 368.173608
Percentage Composition: C 68.46%; H 6.57%; N 7.60%; O 17.37%
Melting Point: Mp 155°

>> **Derivative:** N^2 -Benzyloxycarbonyl

CAS Registry Number: 2640-58-6
Molecular Formula: $C_{13}H_{18}N_2O_4$
Molecular Weight: 266.296
Accurate Mass: 266.126658
Percentage Composition: C 58.64%; H 6.81%; N 10.52%; O 24.03%
Physical Description: Cryst. (H₂O)
Melting Point: Mp 209-210°
Optical Rotation: $[\alpha]_D -8.4$ (c, 1 in 5M HCl)

>> **Derivative:** N^5 -Benzyloxycarbonyl

CAS Registry Number: 3304-51-6
Molecular Formula: $C_{13}H_{18}N_2O_4$
Molecular Weight: 266.296
Accurate Mass: 266.126658
Percentage Composition: C 58.64%; H 6.81%; N 10.52%; O 24.03%
Physical Description: Cryst. (EtOH/HCl)
Melting Point: Mp 254-255°
Sigma: C4002