



Accurate Mass: 231.121907

Percentage Composition: C 46.75%; H 7.41%; N 18.17%; O 27.67%

Melting Point: Mp 103°

>>**Derivative:** Et ester; hydrobromide

Physical Description: Cryst.

Melting Point: Mp 177.6-178.6°

>>**Derivative:** *N*-tert-Butyloxycarbonyl, Me ester

Molecular Formula: C₁₃H₂₃N₃O₆

Molecular Weight: 317.341

Accurate Mass: 317.158687

Percentage Composition: C 49.20%; H 7.30%; N 13.24%; O 30.25%

Physical Description: Cryst.

Melting Point: Mp 115-118°

Optical Rotation: $[\alpha]_D^{20} +4$ (c, 1.0 in DMF)

>>**Derivative:** *N*-Benzyloxycarbonyl, Et ester

CAS Registry Number: 3057-63-4

Molecular Formula: C₁₇H₂₃N₃O₆

Molecular Weight: 365.385

Accurate Mass: 365.158687

Percentage Composition: C 55.88%; H 6.34%; N 11.50%; O 26.27%

Physical Description: Cryst. (EtOAc)

Melting Point: Mp 136-136.8°

>>**Variant:** DL-form

CAS Registry Number: 927-21-9

Molecular Formula: C₇H₁₃N₃O₄

Molecular Weight: 203.197

Accurate Mass: 203.090607

Percentage Composition: C 41.38%; H 6.45%; N 20.68%; O 31.50%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 207°