



Molecular Weight: 145.201
Accurate Mass: 145.110279
Percentage Composition: C 57.90%; H 10.41%; N 9.65%; O 22.04%
Melting Point: Mp 98-100° (as hydrochloride)
Optical Rotation: $[\alpha]_{\text{D}}^{21} +26.6$ (c, 2 in H₂O)

>>Derivative: Et ester

CAS Registry Number: 921-74-4
Boiling Point: Bp₁₀ 75-76°

>>Derivative: Amide

CAS Registry Number: 14445-54-6
Molecular Formula: C₆H₁₄N₂O
Molecular Weight: 130.189
Accurate Mass: 130.110613
Percentage Composition: C 55.35%; H 10.84%; N 21.52%; O 12.29%
Melting Point: Mp 246° (as hydrochloride)
Optical Rotation: $[\alpha]_{\text{D}}^{20} +21.2$ (c, 1 in H₂O)

>>Derivative: N-Formyl

CAS Registry Number: 89810-44-6
Molecular Formula: C₇H₁₃NO₃
Molecular Weight: 159.185
Accurate Mass: 159.089544
Percentage Composition: C 52.82%; H 8.23%; N 8.80%; O 30.15%
Melting Point: Mp 157°
Optical Rotation: $[\alpha]_{\text{D}}^{26} +27$ (c, 3 in EtOH)

>>Derivative: N-Ac

Synonym(s): N-Acetylisoleucine

CAS Registry Number: 3077-46-1

Molecular Formula: C₈H₁₅NO₃
Molecular Weight: 173.211
Accurate Mass: 173.105194
Percentage Composition: C 55.47%; H 8.73%; N 8.09%; O 27.71%
Biological Source: Prod. by *Streptomyces avermitilis*
Melting Point: Mp 150-151°
Optical Rotation: $[\alpha]_{\text{D}}^{25} -8.2$ (c, 2 in H₂O). $[\alpha]_{\text{D}} +15$ (c, 2 in EtOH)

>>Derivative: N-Benzenesulfonyl

Melting Point: Mp 153°
Optical Rotation: $[\alpha]_{\text{D}}^{20} -14.4$ (1M NaOH) (EtOH)

>>Derivative: N-(2,4-Dinitrophenyl)

Physical Description: Cryst. (Et₂O/petrol)
Melting Point: Mp 113-114°
Optical Rotation: $[\alpha]_{\text{D}} +84$ (1M NaOH)

>>Derivative: N-Me

Synonym(s): N-Methylisoleucine

CAS Registry Number: 4125-98-8

Molecular Formula: C₇H₁₅NO₂
Molecular Weight: 145.201
Accurate Mass: 145.110279
Percentage Composition: C 57.90%; H 10.41%; N 9.65%; O 22.04%
Biological Source: Component of Enniatins, Cycloheptamycin and Actinomycins. Isol from seeds of *Phaseolus vulgaris*
Melting Point: Mp 290-291°
Optical Rotation: $[\alpha]_{\text{D}}^{26} +27.5$ (c, 1.07 in H₂O). $[\alpha]_{\text{D}} +47.7$ (c, 1.06 in 6M HCl)