



>>Entry Name: 2-Amino-2-ethylbutanoic acid, 9CI

CAS Registry Number: 2566-29-2

$(\text{H}_3\text{CCH}_2)_2\text{C}(\text{NH}_2)\text{COOH}$

Molecular Formula: $\text{C}_6\text{H}_{13}\text{NO}_2$

Molecular Weight: 131.174

Accurate Mass: 131.094629

Percentage Composition: C 54.94%; H 9.99%; N 10.68%; O 24.39%

Physical Description: Prisms (H_2O)

Melting Point: Mp 309° (sealed tube)

Solubility: Sol. H_2O , spar. sol. EtOH, insol. Et_2O

Other Data: Subl. without melting

>>Derivative: Et ester

Molecular Formula: $\text{C}_8\text{H}_{17}\text{NO}_2$

Molecular Weight: 159.228

Accurate Mass: 159.125929

Percentage Composition: C 60.35%; H 10.76%; N 8.80%; O 20.10%

Physical Description: Oil

Boiling Point: Bp₁₅ 76°

Solubility: Sol. H_2O

>>Derivative: *N*-Benzoyl

Molecular Formula: $\text{C}_{13}\text{H}_{17}\text{NO}_3$

Molecular Weight: 235.282

Accurate Mass: 235.120844

Percentage Composition: C 66.36%; H 7.28%; N 5.95%; O 20.40%

Melting Point: Mp 211°

>>Derivative: Nitrile

Synonym(s): 3-Amino-3-cyanopentane

CAS Registry Number: 22374-51-2

Molecular Formula: $\text{C}_6\text{H}_{12}\text{N}_2$

Molecular Weight: 112.174

Accurate Mass: 112.100048

Percentage Composition: C 64.24%; H 10.78%; N 24.97%

Boiling Point: Bp₁₁ 71°

Density: d₄¹⁵ 0.893

>>Derivative: Nitrile; hydrochloride

Physical Description: Cryst.

Melting Point: Mp 110-113°

References:

Elks, J. *et al.*, *J.C.S.*, 1948, 1386

Org. Synth., Coll. Vol., 3, 1955, 66

Upham, S.D. *et al.*, *J.O.C.*, 1957, **22**, 799

Denmark, S.E. *et al.*, *J.O.C.*, 1997, **62**, 3375-3389, (*Et ester, synth, pmr*)