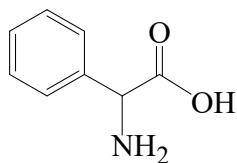




>>Entry Name: **2-Amino-2-phenylacetic acid**

Synonym(s): α -Aminobenzeneacetic acid, 9Cl. 2-Phenylglycine, 8Cl. α -Amino- α -toluic acid



CAS Registry Number: 69-91-0

Related CAS Registry Numbers(s): 15962-49-9 19883-41-1 25287-52-9 38329-34-9 40647-89-0 45789-64-8 71849-99-5 74641-60-4

Molecular Formula: $C_8H_9NO_2$

Molecular Weight: 151.165

Accurate Mass: 151.063329

Percentage Composition: C 63.57%; H 6.00%; N 9.27%; O 21.17%

>>Variant: (*R*)-form

CAS Registry Number: 875-74-1

Molecular Formula: $C_8H_9NO_2$

Molecular Weight: 151.165

Accurate Mass: 151.063329

Percentage Composition: C 63.57%; H 6.00%; N 9.27%; O 21.17%

Biological Use/Importance: Precursor of Cefalexin [CKX78-Z](#) and penicillins

Physical Description: Plates (H_2O), needles (EtOH aq.)

Melting Point: Mp 305-310°

Optical Rotation: $[\alpha]_D^{20} -157.8$ (dil. HCl)

Aldrich: P2548-5

Fluka: 78570

Sigma: A1255

>>Derivative: Hydrochloride

CAS Registry Number: 25705-52-6

Physical Description: Needles (dil. HCl)

Melting Point: Mp 246 dec.°

>>Derivative: Me ester

CAS Registry Number: 24461-61-8

Molecular Formula: $C_9H_{11}NO_2$

Molecular Weight: 165.191

Accurate Mass: 165.078979

Percentage Composition: C 65.44%; H 6.71%; N 8.48%; O 19.37%

Melting Point: Mp 189-191° (as hydrochloride)

Optical Rotation: $[\alpha]_D^{20} -118$ (c, 1 in H_2O)

>>Derivative: Et ester

CAS Registry Number: 39251-40-6

Molecular Formula: $C_{10}H_{13}NO_2$

Molecular Weight: 179.218

Accurate Mass: 179.094629

Percentage Composition: C 67.02%; H 7.31%; N 7.82%; O 17.85%

Melting Point: Mp 203 dec.° (as hydrochloride)

>>Derivative: *tert*-Butyl ester

CAS Registry Number: 65715-93-7

Molecular Formula: $C_{12}H_{17}NO_2$

Molecular Weight: 207.272

Accurate Mass: 207.125929

Percentage Composition: C 69.54%; H 8.27%; N 6.76%; O 15.44%

Physical Description: Needles (hexane)

Melting Point: Mp 41.5-43°

Optical Rotation: $[\alpha]_D^{25} -108$ (c, 1.61 in $CHCl_3$)