



>>Entry Name: [(4-Aminophenyl)methyl]phosphonic acid, 8Cl

Synonym(s): *p*-Aminobenzylphosphonic acid. 4-(Phosphonomethyl)aniline

CAS Registry Number: 5424-27-1

Molecular Formula: C₇H₁₀NO₃P

Molecular Weight: 187.135

Accurate Mass: 187.039831

Percentage Composition: C 44.93%; H 5.39%; N 7.48%; O 25.65%; P 16.55%

Physical Description: Cryst.

Melting Point: Mp 324°

Aldrich: 36735-4

Sigma: A5898

>>Derivative: Di-Me ester

Synonym(s): Dimethyl [(4-aminophenyl)methyl]phosphonate. Dimethyl *p*-aminobenzylphosphonate

Molecular Formula: C₉H₁₄NO₃P

Molecular Weight: 215.188

Accurate Mass: 215.071131

Percentage Composition: C 50.23%; H 6.56%; N 6.51%; O 22.31%; P 14.39%

Physical Description: Cryst. (C₆H₆/petrol)

Melting Point: Mp 103°

>>Derivative: Di-Et ester

Synonym(s): Diethyl [(4-aminophenyl)methyl]phosphonate. Diethyl *p*-aminobenzylphosphonate

CAS Registry Number: 20074-79-7

Molecular Formula: C₁₁H₁₈NO₃P

Molecular Weight: 243.242

Accurate Mass: 243.102431

Percentage Composition: C 54.32%; H 7.46%; N 5.76%; O 19.73%; P 12.73%

Use/Importance: Employed in affinity-chromatogr. sepn. of alkaline phosphatase from human liver

Physical Description: Solid

Melting Point: Mp 91-94°

Aldrich: D8635-3

Fluka: 9225

Sigma: D2765

>>Derivative: Di-Et ester, *N*-Ac

Synonym(s): Diethyl [[4-(*N*-acetylamino)phenyl]methyl]phosphonate

Molecular Formula: C₁₃H₂₀NO₄P

Molecular Weight: 285.279

Accurate Mass: 285.112996

Percentage Composition: C 54.73%; H 7.07%; N 4.91%; O 22.43%; P 10.86%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 144-146°

>>Derivative: Di-Et ester, *N*-Benzoyl

Synonym(s): Diethyl [[4-(*N*-benzylamino)phenyl]methyl]phosphonate

Molecular Formula: C₁₈H₂₂NO₄P

Molecular Weight: 347.35

Accurate Mass: 347.128646

Percentage Composition: C 62.24%; H 6.38%; N 4.03%; O 18.42%; P 8.92%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 150-152°

References: