



>>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: