



>>Entry Name: [(4-Fluorophenyl)methyl]phosphonic acid, 9CI

Synonym(s): *p*-Fluorobenzylphosphonic acid

CAS Registry Number: 80395-14-8

Structure by analogy with [(2-Fluorophenyl)methyl]phosphonic acid, [DNM98-I](#)

Molecular Formula: C₇H₈FO₃P

Molecular Weight: 190.11

Accurate Mass: 190.01951

Percentage Composition: C 44.23%; H 4.24%; F 9.99%; O 25.25%; P 16.29%

>>Derivative: Di-Et ester

Synonym(s): Diethyl [(4-fluorophenyl)methyl]phosphonate

CAS Registry Number: 63909-58-0

Molecular Formula: C₁₁H₁₆FO₃P

Molecular Weight: 246.218

Accurate Mass: 246.08211

Percentage Composition: C 53.66%; H 6.55%; F 7.72%; O 19.49%; P 12.58%

Use/Importance: Wittig-Horner reagent

Physical Description: Liq.

Boiling Point: Bp₆ 148-150°

Refractive Index: n_D²⁰ 1.4780

References:

Ernst, L., *Org. Magn. Reson.*, 1977, **9**, 35, (*synth, cmr, P-31 nmr*)