



>>Entry Name: Ethylphosphonic acid, 9CI, 8CI

Synonym(s): Ethanephosphonic acid

CAS Registry Number: 6779-09-5

EtP(O)(OH)₂

Molecular Formula: C₂H₇O₃P

Molecular Weight: 110.049

Accurate Mass: 110.013282

Percentage Composition: C 21.83%; H 6.41%; O 43.62%; P 28.15%

Physical Description: Hygroscopic cryst.

Melting Point: Mp 44°. Mp 61.5-62.5°

Boiling Point: Bp₈ 330-340°

pKa Value: pK_{a1} 2.45; pK_{a2} 7.85 (25°,H₂O)

Aldrich: 28987-6

>>Derivative: Anilinium salt

Physical Description: Cryst. (2-propanol)

Melting Point: Mp 143-144°

>>Derivative: Di-Me ester

see Dimethyl ethylphosphonate, [DLK04-F](#)

>>Derivative: Mono-Et ester

Synonym(s): Ethyl hydrogen ethylphosphonate. Monoethyl ethylphosphonate

CAS Registry Number: 7305-61-5

Molecular Formula: C₄H₁₁O₃P

Molecular Weight: 138.103

Accurate Mass: 138.044582

Percentage Composition: C 34.79%; H 8.03%; O 34.76%; P 22.43%

Source/Synthesis: Metab. of Fonofos [DLC26-Z](#)

Boiling Point: Bp_{0.04} 92°

Refractive Index: n_D²⁵ 1.4281

>>Derivative: Di-Et ester

see Diethyl ethylphosphonate, [DLJ99-G](#)

>>Derivative: Diisopropyl ester

Synonym(s): Diisopropyl ethylphosphonate

CAS Registry Number: 1067-69-2

Molecular Formula: C₈H₁₉O₃P

Molecular Weight: 194.21

Accurate Mass: 194.107182

Percentage Composition: C 49.48%; H 9.86%; O 24.71%; P 15.95%

Physical Description: Liq.

Boiling Point: Bp_{2.5} 42-44°

>>Derivative: Monobutyl ester

Synonym(s): Monobutyl ethylphosphonate. Butyl hydrogen ethylphosphonate

Molecular Formula: C₆H₁₅O₃P

Molecular Weight: 166.156

Accurate Mass: 166.075882

Percentage Composition: C 43.37%; H 9.10%; O 28.89%; P 18.64%

Physical Description: Liq.

Boiling Point: Bp₁ 140-142°

Density: d₄²⁰ 1.06

Refractive Index: n