>>**Entry Name: Hexylphosphonic acid,** 9CI
Synonym(s): 1-Phosphonohexane. 1-Hexanephosphonic acid

CAS Registry Number: 4721-24-8

$H_3C(CH_2)_5P(O)(OH)_2$

Molecular Formula: $C_6H_{15}O_3P$
Molecular Weight: 166.156
Accurate Mass: 166.075882
Percentage Composition: C 43.37%; H 9.10%; O 28.89%; P 18.64%
Physical Description: Cryst. (petrol)
Melting Point: Mp 105-106°

>>**Derivative:** Di-Me ester
Synonym(s): Dimethyl hexylphosphonate

CAS Registry Number: 6172-92-5

Molecular Formula: $C_8H_{19}O_3P$
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_{10} 121-123°
Refractive Index: n_D^{20} 1.4276

>>**Derivative:** Di-Et ester
Synonym(s): Diethyl hexylphosphonate

CAS Registry Number: 16165-66-5

Molecular Formula: $C_{10}H_{23}O_3P$
Molecular Weight: 222.264
Accurate Mass: 222.138482
Percentage Composition: C 54.04%; H 10.43%; O 21.60%; P 13.94%
Boiling Point: Bp_{16} 195-200°. Bp_2 103°
Refractive Index: n_D^{17} 1.4311

>>**Derivative:** Diisopropyl ester
Synonym(s): Diisopropyl hexylphosphonate

Molecular Formula: $C_{12}H_{27}O_3P$
Molecular Weight: 250.317
Accurate Mass: 250.169782
Percentage Composition: C 57.58%; H 10.87%; O 19.17%; P 12.37%
Boiling Point: Bp_2 111.5-113°
Refractive Index: n_D^{20} 1.4328

>>**Derivative:** Difluoride

CAS Registry Number: 14576-59-1

Molecular Formula: $C_6H_{13}F_2OP$
Molecular Weight: 170.139
Accurate Mass: 170.067208
Percentage Composition: C 42.36%; H 7.70%; F 22.33%; O 9.40%; P 18.21%
Physical Description: Liq.
Boiling Point: Bp 176-177°. Bp_7 58-60°
Density: d_4^{2C}1.07

>>**Derivative:** Dichloride