



>>Entry Name: Hexaethylphosphorous triamide, 8Cl

Synonym(s): Tris(diethylamino)phosphine

CAS Registry Number: 2283-11-6

$\text{P}(\text{NEt}_2)_3$

Molecular Formula: $\text{C}_{12}\text{H}_{30}\text{N}_3\text{P}$

Molecular Weight: 247.363

Accurate Mass: 247.217734

Percentage Composition: C 58.27%; H 12.22%; N 16.99%; P 12.52%

Use/Importance: Desulphurising agent. Uses similar to those for Hexamethylphosphorous triamide [DBP96-P](#)

Physical Description: Liq.

Boiling Point: Bp 245-246°. Bp_{0.6} 72-74°

Aldrich: 25318-9

Fluka: 93329

>>Derivative: Oxide

Synonym(s): Hexaethylphosphoric triamide, 9Cl. Hexaethylphosphoramide

CAS Registry Number: 2622-07-3

Molecular Formula: $\text{C}_{12}\text{H}_{30}\text{N}_3\text{OP}$

Molecular Weight: 263.362

Accurate Mass: 263.212649

Percentage Composition: C 54.73%; H 11.48%; N 15.96%; O 6.08%; P 11.76%

Physical Description: Liq.

Boiling Point: Bp₁₂ 135°. Bp_{1.3} 111°

Density: d_4^{20} 0.97

pKa Value: $\text{p}K_a$ 7.2 (MeNO₂)

Refractive Index: n_D^{20} 1.4633

>>Derivative: Sulfide

Synonym(s): Hexaethylphosphorothioic triamide, 9Cl

CAS Registry Number: 4154-77-2

Molecular Formula: $\text{C}_{12}\text{H}_{30}\text{N}_3\text{PS}$

Molecular Weight: 279.429

Accurate Mass: 279.189804

Percentage Composition: C 51.58%; H 10.82%; N 15.04%; P 11.08%; S 11.48%

Physical Description: Liq.

Boiling Point: Bp_{0.12} 121-122°

Refractive Index: n_D^{23} 1.5040

>>Derivative: Selenide

Synonym(s): Hexaethylphosphoroselenoic triamide

CAS Registry Number: 39181-29-8

Molecular Formula: $\text{C}_{12}\text{H}_{30}\text{N}_3\text{PSe}$

Molecular Weight: 326.323

Accurate Mass: 327.134254

Percentage Composition: C 44.17%; H 9.27%; N 12.88%; P 9.49%; Se 24.20%

Physical Description: Liq.

Boiling Point: Bp_{0.003} 118°

Density: d_4^{20} 1.15

Refractive Index: n_D^{20} 1.5246

>>Derivative: Telluride

Physical Description: No phys. props. reported

References: