>>**Entry Name: Hexaethylphosphorous triamide,** 8CI
Synonym(s): Tris(diethylamino)phosphine

CAS Registry Number: 2283-11-6

$P(NEt_2)_3$

Molecular Formula: $C_{12}H_{30}N_3P$
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, 9CI. Hexaethylphosphoramide

CAS Registry Number: 2622-07-3
Molecular Formula: $C_{12}H_{30}N_3OP$
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: Bp_{12} 135°. $Bp_{1.3}$ 111°
Density: d_4^{20} 0.97
pKa Value: pK_a 7.2 ($MeNO_2$)
Refractive Index: n_D^{20} 1.4633

>>**Derivative:** Sulfide
Synonym(s): Hexaethylphosphorothioic triamide, 9CI

CAS Registry Number: 4154-77-2

Molecular Formula: $C_{12}H_{30}N_3PS$
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: $C_{12}H_{30}N_3PSe$
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: