



>>Entry Name: Diethylphosphine, 9CI

CAS Registry Number: 627-49-6

Et₂PH

Molecular Formula: C₄H₁₁P

Molecular Weight: 90.105

Accurate Mass: 90.059837

Percentage Composition: C 53.32%; H 12.30%; P 34.38%

Physical Description: Liq.

Boiling Point: Bp 85°

Refractive Index: n_D²⁰ 1.4770

Other Data: Highly air-sensitive

Hazard & Toxicity: Highly toxic. Ignites in air

>>Derivative: Oxide

CAS Registry Number: 7215-33-0

Molecular Formula: C₄H₁₁OP

Molecular Weight: 106.104

Accurate Mass: 106.054752

Percentage Composition: C 45.28%; H 10.45%; O 15.08%; P 29.19%

Physical Description: Liq.

Boiling Point: Bp_{0.6} 53-55°

Refractive Index: n_D²⁰ 1.4549

Other Data: Dec. slowly at 180-200°. Tautomeric with Diethylphosphinous acid [GGV81-B](#)

>>Derivative: Sulfide

CAS Registry Number: 6591-06-6

Molecular Formula: C₄H₁₁PS

Molecular Weight: 122.171

Accurate Mass: 122.031907

Percentage Composition: C 39.33%; H 9.07%; P 25.35%; S 26.25%

Physical Description: Liq.

Boiling Point: Bp_{0.3} 51-55°

Refractive Index: n_D²⁰ 1.5350

Other Data: Tautomeric with diethylphosponothious acid

References:

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