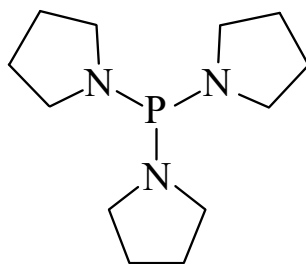




>>Entry Name: **Tri-1-pyrrolidinylphosphine**

Synonym(s): 1,1',1''-Phosphinidynetrispyrrolidine, 9Cl. Tris(pyrrolidino)phosphine. Tri-1-pyrrolidylphosphine



CAS Registry Number: 5666-12-6

Molecular Formula: C₁₂H₂₄N₃P

Molecular Weight: 241.315

Accurate Mass: 241.170784

Percentage Composition: C 59.73%; H 10.02%; N 17.41%; P 12.84%

Physical Description: Liq.

Boiling Point: Bp_{0.1} 103-104°

Density: d₄²⁰ 1.05

Refractive Index: n_D¹⁹ 1.5268

>>Derivative: Oxide

Synonym(s): 1,1',1''-Phosphinylidynetrispyrrolidine. Tris(pyrrolidino)phosphine oxide

CAS Registry Number: 6415-07-2

Molecular Formula: C₁₂H₂₄N₃OP

Molecular Weight: 257.315

Accurate Mass: 257.165699

Percentage Composition: C 56.01%; H 9.40%; N 16.33%; O 6.22%; P 12.04%

Use/Importance: Highly polar aprotic solvent with electron-donating power greater than any other known solv.

Melting Point: Mp 14°

Boiling Point: Bp_{0.5} 143°

Density: d₄²⁵ 1.15

Refractive Index: n_D²⁵ 1.5115

Fluka: 93404

>>Derivative: Selenide

Synonym(s): 1,1',1''-Phosphinoselenoylidynetrispyrrolidine. Tris(pyrrolidino)phosphine selenide

CAS Registry Number: 75404-57-8

Molecular Formula: C₁₂H₂₄N₃PSe

Molecular Weight: 320.275

Accurate Mass: 321.087304

Percentage Composition: C 45.00%; H 7.55%; N 13.12%; P 9.67%; Se 24.65%

Physical Description: Cryst. (hexane)

Melting Point: Mp 51°

>>Derivative: Telluride

Synonym(s): 1,1',1''-Phosphinotelluroylidynetrispyrrolidine. Tris(pyrrolidino)phosphine telluride

CAS Registry Number: 75404-56-7

Molecular Formula: C₁₂H₂₄N₃PTe

Molecular Weight: 368.915

Accurate Mass: 371.077013

Percentage Composition: C 39.07%; H 6.56%; N 11.39%; P 8.40%; Te 34.59%

Physical Description: Cream-coloured cryst. (hexane)

Melting Point: Mp 84-85°

References:

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Mathis, R. *et al.*, *Spectrochim. Acta A*, 1974, **30**, 357, (*ir*)

Yvernault, T. *et al.*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1978, **287**, 519, (*oxide, synth, props*)

R}omming, C. *et al.*, *Acta Chem. Scand., Ser. A*, 1980, **34**, 333; 1994, **38**, 349, (*selenide, telluride, ir, uv, cryst struct*)

Bergesen, K. *et al.*, *Acta Chem. Scand., Ser. A*, 1981, **35**, 147, (*cmr*)