



>>Entry Name: *P*-Methylphosphonic diamide, 9CI
Synonym(s): Methanephosphonamide. Antipyrène T2

CAS Registry Number: 4759-30-2

MeP(O)(NH₂)₂

Molecular Formula: CH₇N₂OP
Molecular Weight: 94.053
Accurate Mass: 94.0296
Percentage Composition: C 12.77%; H 7.50%; N 29.78%; O 17.01%; P 32.93%
Use/Importance: Employed, as are many of its derivs., in fire-proofing preparations
Physical Description: Plates (MeOH)
Melting Point: Mp 128-129° (sealed tube)
Other Data: Hydrolysed in damp atmos. to the diammonium salt of methylphosphonic acid

>>Derivative: *N,N'*-Di-Me
Synonym(s): *N,N',P*-Trimethylphosphonic diamide. Methylphosphonic bis(methylamide)

CAS Registry Number: 67704-60-3

Molecular Formula: C₃H₁₁N₂OP
Molecular Weight: 122.106
Accurate Mass: 122.0609
Percentage Composition: C 29.51%; H 9.08%; N 22.94%; O 13.10%; P 25.37%
Physical Description: Plates (C₆H₆)
Melting Point: Mp 63-65°

>>Derivative: *N,N,N',N'*-Tetra-Me
Synonym(s): Pentamethylphosphonic diamide. Methylphosphonic bis(dimethylamide). Diaphos

CAS Registry Number: 2511-17-3

Molecular Formula: C₅H₁₅N₂OP
Molecular Weight: 150.16
Accurate Mass: 150.0922
Percentage Composition: C 39.99%; H 10.07%; N 18.66%; O 10.65%; P 20.63%
Physical Description: Liq.
Boiling Point: Bp₃₂ 138°. Bp₁ 74-77°
Density: d₄³⁰ 1.02
Refractive Index: n_D³⁰ 1.4539
Fluka: 64257

>>Derivative: *N,N,N',N'*-Tetra-Et
Synonym(s): *N,N,N',N'*-Tetraethyl-*P*-methylphosphonic diamide. Methylphosphonic bis(diethylamide)

Molecular Formula: C₉H₂₃N₂OP
Molecular Weight: 206.267
Accurate Mass: 206.1548
Percentage Composition: C 52.41%; H 11.24%; N 13.58%; O 7.76%; P 15.02%
Physical Description: Liq.
Boiling Point: Bp₃₃ 166°
Refractive Index: n_D³⁰ 1.4565

>>Derivative: *N,N,N',N'*-Tetraisopropyl
Synonym(s): Methylphosphonic bis(diisopropylamide). *N,N,N',N'*-Tetrakis(1-methylethyl)-*P*-methylphosphonic diamide

CAS Registry Number: 97135-53-0

Molecular Formula: C₁₃H₃₁N₂OP
Molecular Weight: 262.374
Accurate Mass: 262.2174
Percentage Composition: C 59.51%; H 11.91%; N 10.68%; O 6.10%; P 11.81%
Physical Description: Liq.
Boiling Point: Bp₁₂ 145°