



>>Entry Name: Tetramethylphosphonium(1+)

CAS Registry Number: 32589-80-3

$\text{PMe}_4^{(+)}$

Molecular Formula: $\text{C}_4\text{H}_{12}\text{P}^{(+)}$

Molecular Weight: 91.112

Accurate Mass: 91.067662

Percentage Composition: C 52.73%; H 13.27%; P 34.00%

>>Derivative: Chloride

CAS Registry Number: 1941-19-1

Molecular Formula: $\text{C}_4\text{H}_{12}\text{ClP}$

Molecular Weight: 126.565

Accurate Mass: 126.036514

Percentage Composition: C 37.96%; H 9.56%; Cl 28.01%; P 24.47%

Physical Description: Hygroscopic cryst. (EtOH/Et₂O)

Melting Point: Mp 345°. Mp 396-397°. Mp 406°

Aldrich: 28827-6

>>Derivative: Bromide

CAS Registry Number: 4519-28-2

Molecular Formula: $\text{C}_4\text{H}_{12}\text{BrP}$

Molecular Weight: 171.016

Accurate Mass: 170.005998

Percentage Composition: C 28.09%; H 7.07%; Br 46.72%; P 18.11%

Physical Description: Hygroscopic cryst. (MeOH/Et₂O)

Melting Point: Mp 160-180°. Mp 300°

Aldrich: 28826-8

Fluka: 87895

>>Derivative: Iodide

CAS Registry Number: 993-11-3

Molecular Formula: $\text{C}_4\text{H}_{12}\text{IP}$

Molecular Weight: 218.017

Accurate Mass: 217.972135

Percentage Composition: C 22.04%; H 5.55%; I 58.21%; P 14.21%

Physical Description: Cryst. (EtOH/Et₂O)

Melting Point: Mp 360° (sealed tube)

>>Derivative: Hexafluorophosphate

CAS Registry Number: 82363-10-8

Molecular Formula: $\text{C}_4\text{H}_{12}\text{F}_6\text{P}_2$

Molecular Weight: 236.077

Accurate Mass: 236.031842

Percentage Composition: C 20.35%; H 5.12%; F 48.29%; P 26.24%

Physical Description: Phys. props. not recorded

>>Derivative: Fluorosulfate

CAS Registry Number: 85316-48-9

Molecular Formula: $\text{C}_4\text{H}_{12}\text{FO}_3\text{PS}$

Molecular Weight: 190.175

Accurate Mass: 190.02288

Percentage Composition: C 25.26%; H 6.36%; F 9.99%; O 25.24%; P 16.29%; S 16.86%

Physical Description: Solid

Melting Point: Mp 271°

References: