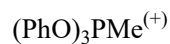




>>Entry Name: Methyltriphenoxyphosphonium(1+)

Synonym(s): Methyltriphenoxyphosphorus(1+), 9CI



Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{O}_3\text{P}^{(+)}$

Molecular Weight: 325.323

Accurate Mass: 325.099357

Percentage Composition: C 70.15%; H 5.58%; O 14.75%; P 9.52%

>>Derivative: Iodide

Synonym(s): Triphenylphosphite methiodide

CAS Registry Number: 17579-99-6

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{IO}_3\text{P}$

Molecular Weight: 452.228

Accurate Mass: 452.00383

Percentage Composition: C 50.46%; H 4.01%; I 28.06%; O 10.61%; P 6.85%

Use/Importance: Reagent for conversion of alcohols to alkyl iodides and epoxides to alkenes. Also used for dehydrations and dehydrohalogenations under mild conditions

Physical Description: Amber cryst.

Melting Point: Mp 146°

Aldrich: 22643-2

Fluka: 69490

>>Derivative: Trifluoromethanesulfonate

Molecular Formula: $\text{C}_{20}\text{H}_{18}\text{F}_3\text{O}_6\text{PS}$

Molecular Weight: 474.394

Accurate Mass: 474.051381

Percentage Composition: C 50.64%; H 3.82%; F 12.01%; O 20.24%; P 6.53%; S 6.76%

Use/Importance: Used in synth. of ethers, esters, nitriles and diols, and in connection with redn. of alkenes to alkanes

Physical Description: Cryst.

Melting Point: Mp 96.5-98.5°

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Cortés, M.J. *et al.*, *Heterocycles*, 1984, **22**, 1951, (use)

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