



>>Entry Name: Nonyltriphenylphosphonium(1+), 9Cl

CAS Registry Number: 111922-65-7

Related CAS Registry Numbers(s): 54208-02-5 111922-66-8 111922-67-9 111922-68-0

$\text{Ph}_3\text{P}^{(+)}(\text{CH}_2)_8\text{CH}_3$

Molecular Formula: $\text{C}_{27}\text{H}_{34}\text{P}^{(+)}$

Molecular Weight: 389.539

Accurate Mass: 389.239812

Percentage Composition: C 83.25%; H 8.80%; P 7.95%

>>Derivative: Bromide

CAS Registry Number: 60902-45-6

Molecular Formula: $\text{C}_{27}\text{H}_{34}\text{BrP}$

Molecular Weight: 469.443

Accurate Mass: 468.178148

Percentage Composition: C 69.08%; H 7.30%; Br 17.02%; P 6.60%

Use/Importance: Source of ylide, obt. with RLi

Physical Description: Viscous oil or glass

>>Derivative: Iodide

CAS Registry Number: 39589-66-7

Molecular Formula: $\text{C}_{27}\text{H}_{34}\text{IP}$

Molecular Weight: 516.444

Accurate Mass: 516.144285

Percentage Composition: C 62.79%; H 6.64%; I 24.57%; P 6.00%

Use/Importance: Source of ylide, obt. with RLi

Physical Description: Yellow prisms ($\text{Me}_2\text{CO}/\text{Et}_2\text{O}$)

Melting Point: Mp 80-80.5°

>>Derivative: Ylide

Synonym(s): Nonylidenetriphenylphosphorane. Triphenylphosphonium nonylide

CAS Registry Number: 54208-05-8

Molecular Formula: $\text{C}_{27}\text{H}_{33}\text{P}$

Molecular Weight: 388.531

Accurate Mass: 388.231987

Percentage Composition: C 83.47%; H 8.56%; P 7.97%

Use/Importance: Used in synth. of insect pheromones and natural acetylenes

References:

Barley, G.C. *et al.*, *J.C.S. Perkin I*, 1973, 151, (iodide, use)

Ohloff, G. *et al.*, *Helv. Chim. Acta*, 1977, **60**, 1161, (bromide)

Spur, B. *et al.*, *Arch. Pharm. (Weinheim, Ger.)*, 1983, **316**, 789, (ylide)

Massy-Westropp, R.A. *et al.*, *Aust. J. Chem.*, 1984, **37**, 1969, (synth, use)

Achmatowicz, O. *et al.*, *Pol. J. Chem. (Rocz. Chem.)*, 1985, **59**, 553, (synth)