



>>Entry Name: (Triphenylphosphoranylidene)ethenone, 9CI

Synonym(s): Triphenylphosphonium oxoethenylide, 11CI. Ketenylidenetriphenylphosphorane. Triphenylphosphoranylidene ketene

CAS Registry Number: 15596-07-3

Related CAS Registry Numbers(s): 73818-55-0

$\text{Ph}_3\text{P}=\text{C}=\text{C}=\text{O}$

Molecular Formula: $\text{C}_{20}\text{H}_{15}\text{OP}$

Molecular Weight: 302.312

Accurate Mass: 302.086052

Percentage Composition: C 79.46%; H 5.00%; O 5.29%; P 10.25%

Use/Importance: Employed in synth. of steroids and heterocyclic compds. and in synth. of α,β -enones, unsaturated esters and lactones

Physical Description: Needles (toluene)

Melting Point: Mp 171-172°

References:

Daly, J.J. *et al.*, *J.C.S.(A)*, 1966, 1703, (cryst struct)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 446; **10**, 450; **11**, 281; **12**, 268; **13**, 154, (use)

Lumbroso, H. *et al.*, *J. Organomet. Chem.*, 1978, **161**, 347, (struct)

Nickisch, K. *et al.*, *Chem. Ber.*, 1980, **113**, 2038; 3086, (use)

Bestmann, H.J. *et al.*, *Chem. Ber.*, 1980, **113**, 274; 912; 1985, **118**, 1709, (synth, P-31 nmr, ir, props, use)

Albright, T.A. *et al.*, *Z. Naturforsch., B*, 1980, **35**, 343, (struct)

Bestmann, H.J. *et al.*, *Angew. Chem., Int. Ed.*, 1985, **24**, 405; 790, (use)

Bestmann, H.J. *et al.*, *Synthesis*, 1988, 49, (synth)

Knie}zo, L. *et al.*, *Tetrahedron*, 1988, **44**, 543, (use)