



>>Entry Name: Triphenylphosphoranylideneacetaldehyde, 9Cl, 8Cl

Synonym(s): Formylmethylenetriphenylphosphorane. 2-Oxoethylidenetriphenylphosphorane. Formylmethylenetriphenylphosphorane. Triphenylphosphonium 2-oxoethylide

CAS Registry Number: 2136-75-6

Related CAS Registry Numbers(s): 28900-91-6

$\text{Ph}_3\text{P}=\text{CHCHO}$

Molecular Formula: $\text{C}_{20}\text{H}_{17}\text{OP}$

Molecular Weight: 304.327

Accurate Mass: 304.101702

Percentage Composition: C 78.93%; H 5.63%; O 5.26%; P 10.18%

Use/Importance: Used in Wittig synth. of α,β -unsaturated aldehydes

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 187-188 dec. $^\circ$

Other Data: Alkylation $\rightarrow$ enol ether. Forms complexes of Fe and W

Aldrich: 28093-3

Fluka: 47720

Rare Chemicals Library: S18095-5

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **2**, 1679B, (*nmr*)

Trippett, S. *et al.*, *J.C.S.*, 1961, 1266, (*synth*)

Dale, A.J. *et al.*, *Acta Chem. Scand.*, 1970, **24**, 2681, (*ir, pmr*)

Snyder, J.P. *et al.*, *Tet. Lett.*, 1970, 3317, (*conformn, pmr, P-31 nmr*)

Bestmann, H.J. *et al.*, *Angew. Chem., Int. Ed.*, 1979, **18**, 687, (*use*)

Olstein, R. *et al.*, *Aust. J. Chem.*, 1979, **32**, 681, (*use*)

Brittain, J.M. *et al.*, *Tetrahedron*, 1979, **35**, 1139, (*P-31 nmr*)

Godard, A. *et al.*, *J. Het. Chem.*, 1982, **19**, 1289, (*use*)

Geoffray, M. *et al.*, *J.A.C.S.*, 1990, **112**, 2826, (*cryst struct*)