



>>Entry Name: 1,2-Bis(dicyclohexylphosphino)ethane

Synonym(s): 1,2-Ethanediylbis[dicyclohexylphosphine], 9CI

CAS Registry Number: 23743-26-2

As 1,4-Bis(dicyclohexylphosphino)butane, DNZ49-H with
n = 2

Molecular Formula: C₂₆H₄₈P₂

Molecular Weight: 422.613

Accurate Mass: 422.323124

Percentage Composition: C 73.89%; H 11.45%; P 14.66%

Use/Importance: Ligand for Cr, Ni and W

Physical Description: Cryst. (THF/Et₂O or THF/EtOH)

Melting Point: Mp 82-85°. Mp 96-97°

Other Data: Forms red CS₂ adduct

>>Derivative: Dioxide

Synonym(s): 1,2-Bis(dicyclophosphinyl)ethane

CAS Registry Number: 16527-12-1

Molecular Formula: C₂₆H₄₈O₂P₂

Molecular Weight: 454.611

Accurate Mass: 454.312954

Percentage Composition: C 68.69%; H 10.64%; O 7.04%; P 13.63%

Physical Description: Solid

Melting Point: Mp 192°

Other Data: Forms complexes with Gp. VI metals

>>Derivative: Disulfide

Synonym(s): 1,2-Bis(dicyclophosphinothioyl)ethane

Molecular Formula: C₂₆H₄₈P₂S₂

Molecular Weight: 486.745

Accurate Mass: 486.267264

Percentage Composition: C 64.16%; H 9.94%; P 12.73%; S 13.18%

Physical Description: Solid

Melting Point: Mp 195-197°

References:

Issleib, K. *et al.*, *Chem. Ber.*, 1963, **96**, 1544; 2186, (*synth*)

Connor, J.A. *et al.*, *J. Organomet. Chem.*, 1975, **94**, 55, (*dioxide, synth, ms, ir*)

Burt, R.J. *et al.*, *J. Organomet. Chem.*, 1979, **182**, 203, (*synth, P-31 nmr*)

Yamamoto, K. *et al.*, *Chem. Lett.*, 1984, 1603, (*dioxide*)