



>>Entry Name: **1,1-Bis(diphenylphosphino)ethylene**

Synonym(s): Ethenylidenebis(diphenylphosphine), 9Cl. Vinylidenebis(diphenylphosphine)

CAS Registry Number: 84494-89-3

$\text{H}_2\text{C}=\text{C}(\text{PPh}_2)_2$

Molecular Formula: $\text{C}_{26}\text{H}_{22}\text{P}_2$

Molecular Weight: 396.407

Accurate Mass: 396.119674

Percentage Composition: C 78.78%; H 5.59%; P 15.63%

Use/Importance: Forms 1:1 and 1:2 Au complexes

Physical Description: Cryst. (EtOH)

Melting Point: Mp 112-115°

Aldrich: 37714-7

>>Derivative: Methiodide (1:2)

Synonym(s): 1,1-Bis(methyldiphenylphosphonio)ethene diiodide

Molecular Formula: $\text{C}_{28}\text{H}_{28}\text{I}_2\text{P}_2$

Molecular Weight: 680.286

Accurate Mass: 679.97557

Percentage Composition: C 49.44%; H 4.15%; I 37.31%; P 9.11%

Physical Description: Cryst. (CHCl_3)

Melting Point: Mp 246 dec.°

>>Derivative: Dioxide

Synonym(s): 1,1-Bis(diphenylphosphinyl)ethylene

CAS Registry Number: 29207-36-1

Molecular Formula: $\text{C}_{26}\text{H}_{22}\text{O}_2\text{P}_2$

Molecular Weight: 428.406

Accurate Mass: 428.109504

Percentage Composition: C 72.89%; H 5.18%; O 7.47%; P 14.46%

Physical Description: Cryst. (C_6H_6)

Melting Point: Mp 205° (197-199°)

>>Derivative: Disulfide

Synonym(s): 1,1-Bis(diphenylphosphinothioyl)ethylene

CAS Registry Number: 97106-56-4

Molecular Formula: $\text{C}_{26}\text{H}_{22}\text{P}_2\text{S}_2$

Molecular Weight: 460.539

Accurate Mass: 460.063814

Percentage Composition: C 67.81%; H 4.81%; P 13.45%; S 13.93%

Physical Description: Solid

Melting Point: Mp 184°

>>Derivative: Diselenide

Synonym(s): 1,1-Bis(diphenylphosphinoselenoyl)ethylene

CAS Registry Number: 84494-91-7

Molecular Formula: $\text{C}_{26}\text{H}_{22}\text{P}_2\text{Se}_2$

Molecular Weight: 554.327

Accurate Mass: 555.952714

Percentage Composition: C 56.34%; H 4.00%; P 11.18%; Se 28.49%

Physical Description: Solid

Melting Point: Mp 188°

References: