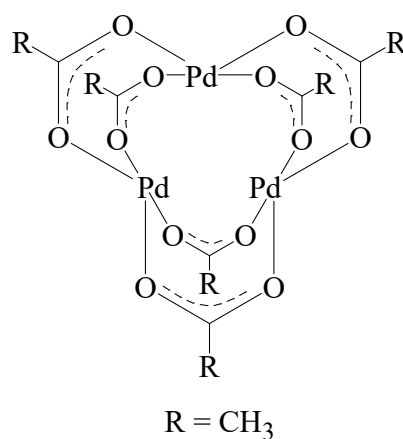




>>Entry Name: Hexakis[μ-(acetato-*O:O'*)]tripalladium, 9Cl, 8Cl

Synonym(s): Hexaacetatotripalladium(II). Palladium (II) acetate



CAS Registry Number: 29950-51-4

Related CAS Registry Numbers(s): 33571-36-7 53189-26-7

Extra CAS Registry Numbers(s): 19807-27-3

Molecular Formula: C₁₂H₁₈O₁₂Pd₃

Molecular Weight: 673.527

Accurate Mass: 671.790264

Percentage Composition: C 21.40%; H 2.69%; O 28.51%; Pd 47.40%

Use/Importance: Commercially available. Precursor for Pd-CO complexes and catalyst for many org. reactions: (1) Used as catalyst in lactonisation of dienes; synth. of 1,3,5-trienes; silyl coupling reagents; vinylation of cycloalkenes; arylannulation of 1,3-dienes; synth. of bicyclic acetals; cyclopentenone synth; coupling of vinyl halides with allylic alcohols; oxaspirocyclic addn. to 1,3-dienes; Heck cyclisation. (2) Used in mixed catalyst systems (e.g. with dppp, PPh₃, K formate, Ph₃As) in carbonylation of allylamine; methoxy carbonylation; Heck cyclisation; spirocyclisation; cyclisation of tetraenes; cross coupling of allenes/1-alkynes; α-regioselective arylation of enol ethers; stereoselective synth. of 1,2,4-triols; ArBr → Ar-Ar reactions; indole synth.; Stille coupling; polycyclisation of dienyne. Catalyst for selective hydrogenation of epoxidised natural rubber; highly selective in reducing olefinic unsaturation in presence of epoxy groups

Physical Description: Purple cryst. (CHCl₃ or C₆H₆/glacial HOAc) or red-brown plates

Melting Point: Mp 200 dec.°

Solubility: Sol. C₆H₆, polar org. solvs.

>>Derivative: Monomer

Synonym(s): Palladium acetate

CAS Registry Number: 3375-31-3

Molecular Formula: C₄H₆O₄Pd

Molecular Weight: 224.509

Accurate Mass: 223.930088

Percentage Composition: C 21.40%; H 2.69%; O 28.51%; Pd 47.40%

Aldrich: 20586-9

Fluka: 76044

Sigma: P6901

References:

- Aldrich Library of FT-IR Spectra, 1st edn.*, 1985, **2**, 1235C, (*ir*)
Stephenson, T.A. *et al.*, *J.C.S.*, 1965, 3632, (*synth, ir*)
Skapski, A.C. *et al.*, *Chem. Comm.*, 1970, 658, (*cryst struct*)
Cotton, F.A. *et al.*, *Rev. Chim. Miner.*, 1985, **22**, 277, (*cryst struct*)
Compr. Coord. Chem., Pergamon, 1987, **5**, 1111; **6**, 280; 301; 307, (*use*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1989, **14**, 248; **15**, 245; **16**, 259; **17**, 255, (*use*)
Bhattacharjee, S. *et al.*, *Polymer*, 1993, **34**, 5168, (*use*)