



>>Entry Name: Palladium(II) oxide (PdO), 8Cl

CAS Registry Number: 1314-08-5

Extra CAS Registry Numbers(s): 11113-77-2

PdO

Molecular Formula: OPd

Molecular Weight: 122.419

Accurate Mass: 121.898393

Percentage Composition: O 13.07%; Pd 86.93%

Source/Synthesis: Synth. from Palladium [JCC05-V](#) + O₂

Use/Importance: Commercially available. Has many catalytic applications

Physical Description: Black solid

Melting Point: Mp 870°

Solubility: Insol. H₂O, acids

Other Data: Dec. at 875°

Aldrich: 20397-1

Fluka: 76080

>>Derivative: Hydrate

CAS Registry Number: 64109-12-2

Source/Synthesis: Synth. from aq. Pd²⁽⁺⁾ + NO₃⁽⁻⁾

Use/Importance: Commercially available

Physical Description: Yellow gel

Solubility: Sol. acids

Other Data: Cannot be fully dehydrated, degree of hydration variable

Aldrich: 20584-2

Sigma: P3933

References:

Sidgwick, N.V., *The Chemical Elements and their Compds.*, Oxford, 1950, 1558

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1728, (*synth*)

Wells, A.F., *Structural Inorg. Chem.*, 5th Ed., Oxford, 1984, 539, (*struct*)

Cotton, F.A. *et al.*, *Advanced Inorganic Chemistry*, 5th Edn, Wiley Interscience, 1988, 872