

**About the solubility of palladium oxide and hydroxide at 25 °C**

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The critical review of literary data on thermodynamic properties of substances and aqueous species existing in heterogeneous system PdO–H<sub>2</sub>O is performed. The constants of palladium oxide and hydroxide dissolution reactions in water are recommended.

The value of  $\Delta_f G^\circ_{298.15}$  obtained in the present study for Pd<sup>2+</sup> (aq) essentially (at least by 6 kJ/mol) differs from the values specified in fundamental thermodynamic databases and based on experimental data for palladium electrode potential determined at 25 °C.

*Key words: thermodynamics, PdO, solubility, Pd<sup>2+</sup>*

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