

**substance: PdO**

**property: enthalpy, entropy, dissociation pressure**

**thermodynamical parameters**

|                |  |   |     |
|----------------|--|---|-----|
| $\Delta H_f^0$ | $-25.8 \text{ kcal mol}^{-1}$                | reaction: $\text{Pd(s)} + 1/2 \text{ O}_2 \rightarrow \text{PdO (s)}$ ;<br>see [66B, 78R] | 66B |
| $\Delta S_f^0$ | $-22.5 \text{ cal K}^{-1} \text{ mol}^{-1}$  |   |     |
| $\Delta H_f^0$ | $-26.8 \text{ kcal mol}^{-1}$                |   |     |
| $\Delta S_f^0$ | $-23.6 \text{ cal K}^{-1} \text{ mol}^{-1}$  |   |     |
| $\Delta H_f^0$ | $-27.37 \text{ kcal mol}^{-1}$               |   |     |
| $\Delta S_f^0$ | $-24.00 \text{ cal K}^{-1} \text{ mol}^{-1}$ |   | 74B |

**oxygen dissociation pressure**

|     |                    |   |     |
|-----|--------------------|---|-----|
| $p$ | $-11220 \text{ K}$ | $\log_{10} p_{\text{O}_2} = p/T + q$ , $T$ in K<br>( $p_{\text{O}_2}$ in atm) | 74B |
| $q$ | $12.63$            |   |     |
| $p$ | $-13257 \text{ K}$ |   | 76T |
| $q$ | $12.11$            |   |     |

**References:**

- 66B Bell, W. E., Inyard, R. E., Tagami, M.: J. Phys. Chem. 70 (1966) 3735.
- 74B Bayer G., Wiedmann, H. G.: Thermal Anal. Proc. Int. Conf. 4th. H. Buzas (ed.) London: Heiden, 1975, p. 763.
- 76T Tagirov, V. K., Chizhikov, D. M., Kazanas, E. K., Shubochkin, L. K.: Zh. Neorg. Khim. 21 (1976) 2565.
- 78R Rey, E., Kamal, M. R., Miles, R. B., Joyce, B. S. H.: J. Mater. Sci. 13 (1978) 812.