

Antimony(III)

Reaction	Baes and Mesmer, 1976	Lothenbach et al., 1999; Kitamura et al., 2010	Filella and May, 2003
$\text{Sb(OH)}_3 + \text{H}^+ = \text{Sb(OH)}_2^+ + \text{H}_2\text{O}$	1.41	1.30	1.371
$\text{Sb(OH)}_3 + \text{H}_2\text{O} = \text{Sb(OH)}_4^- + \text{H}^+$	-11.82	-11.93	-11.70
$0.5 \text{Sb}_2\text{O}_3(\text{s}) + 1.5 \text{H}_2\text{O} = \text{Sb(OH)}_3$	-4.24		
$\text{Sb}_2\text{O}_3(\text{rhombic},\text{s}) + 3 \text{H}_2\text{O} = 2 \text{Sb(OH)}_3$		-8.72	-10.00
$\text{Sb}_2\text{O}_3(\text{cubic},\text{s}) + 3 \text{H}_2\text{O} = 2 \text{Sb(OH)}_3$			-11.40

C.F. Baes and R.E. Mesmer, *The Hydrolysis of Cations*. Wiley, New York, 1976, p. 375.

M. Filella and P.M. May, Computer simulation of the low-molecular-weight inorganic species distribution of antimony(III) and antimony(V) in natural waters. *Geochim. Cosmochim. Acta* 67, 4013-4031 (2003). doi:10.1016/S0016-7037(03)00095-4

A. Kitamura, K. Fujiwara, R. Doi, Y. Yoshida, M. Mihara, M. Terashima and M. Yui, *JAEA Thermodynamic Database for Performance Assessment of Geological Disposal of High-Level Radioactive and TRU-Wastes*. Report JAEA-Data/Code 2009-024, Japan Atomic Energy Agency (2010).

B. Lothenbach, M. Ochs, H. Wanner and M. Yui, *Thermodynamic Data for the Speciation and Solubility of Pd, Pb, Sn, Sb, Nb and Bi in Aqueous Solution*. Japan Nuclear Cycle Development Institute (JNC), TN8400 99-011 (1999).