

Table I-11. The first hydrolysis constants of cations at 25C and I=0.

Z	z	-log *K ₁	Z	z	-log *K ₁	Z	z	-log *K ₁
Ac-89	3	10.4	Hf-72	4	0.3S	PuO ₂ ⁺²	6	5.6
Ag-47	1	12	Hg-80	2	3.4	Rh-45	3	3.3C
Al-13	3	5	Ho-67	3	8	Ru-44	3	2.2R
Am-95	3	5.8S	In-49	3	4	RuO ₄ ^o	8	11.9
Ba-56	2	13.5	Ir-77	3	4.4C	Sc-21	3	4.3
Be-4	2	5.4	K-19	1	14.5	Sm-62	3	7.9
Bi-83	3	1.1	La-57	3	8.5	Sn-50	4	-1.5
Bk-97	3	5.5S	Li-3	1	13.6	Sr-38	2	13.3
Ca-20	2	12.9	Lu-71	3	7.6	Tb-65	3	7.9
Cd-48	2	10.1	Mg-12	2	11.4	Th-90	4	3.2
Ce-58	3	8.3	Mn-25	2	10.6	Ti-22	3	2.2
	4	-0.7		3	-0.3	TiO ⁺²	4	2.3
Cf-98	3	5.5S	Na-11	1	14.2	Tl-81	1	13.2
Cm-96	3	5.8S	Nd-60	3	8		3	0.62
Co-27	2	9.7	Ni-28	2	9.9	Tm-69	3	7.7
	3	1.3	Np-93	4	1.5	U-92	4	0.65
Cr-24	3	4	NpO ₂ ⁺	5	8.9	UO ₂ ⁺²	6	5.8
Cu-29	2	7.9	OsO ₄ ^o	8	12.1	V-23	3	2.3
Dy-66	3	8	Pa-91	4	-0.84	VO ⁺²	4	5.4
Er-68	3	7.9	PaO ₂ ⁺	5	4.5	Y-39	3	7.7
Eu-63	3	7.8	Pb-82	2	7.7	Yb-70	3	7.7
Fe-26	2	9.5	Pd-46	2	(2.3)A	Zn-30	2	9
	3	2.2	Pr-59	3	8.1	Zr-40	4	-0.1S
Ga-31	3	2.6	Pu-94	3	7			
Gd-64	3	8		4	0.5			

Note: Data are mainly from Baes and Mesmer (1981). A: Pd value is at 17C and in 0.1 M

NaClO₄, C=Cotton and Wilkinson (1988), R=Rard (1985), S=Smith and Martell (1976).