

ACID-BASE TABLE

Acid Name	Conjugate Acid	K _a	pK _a	Conjugate Base	Base Name
perchloric acid	HClO ₄	>> 1	< 0	ClO ₄ ¹⁻	perchlorate ion
hydrohalic acid	HX (X = I, Br, Cl)	>> 1	< 0	X ¹⁻	halide ion
sulfuric acid	H ₂ SO ₄	>> 1	< 0	HSO ₄ ¹⁻	hydrogen sulfate ion
nitric acid	HNO ₃	>> 1	< 0	NO ₃ ¹⁻	nitrate ion
hydronium ion	H ₃ O ¹⁺	1.0	0.00	H ₂ O	water
iodic acid	HIO ₃	0.17	0.77	IO ₃ ¹⁻	iodate ion
oxalic acid	H ₂ C ₂ O ₄	5.9 × 10 ⁻²	1.23	HC ₂ O ₄ ¹⁻	hydrogen oxalate ion
sulfurous acid	H ₂ SO ₃	1.5 × 10 ⁻²	1.82	HSO ₃ ¹⁻	hydrogen sulfite ion
hydrogen sulfate ion	HSO ₄ ¹⁻	1.2 × 10 ⁻²	1.92	SO ₄ ²⁻	sulfate ion
phosphoric acid	H ₃ PO ₄	7.5 × 10 ⁻³	2.12	H ₂ PO ₄ ¹⁻	dihydrogen phosphate ion
hydrofluoric acid	HF	7.2 × 10 ⁻⁴	3.14	F ¹⁻	fluoride ion
nitrous acid	HNO ₂	4.0 × 10 ⁻⁴	3.40	NO ₂ ¹⁻	nitrite ion
formic acid	HCHO ₂	1.8 × 10 ⁻⁴	3.74	CHO ₂ ¹⁻	formate ion
lactic acid	HC ₃ H ₅ O ₃	1.4 × 10 ⁻⁴	3.85	C ₃ H ₅ O ₃ ¹⁻	lactate ion
hydrogen oxalate ion	HC ₂ O ₄ ¹⁻	6.4 × 10 ⁻⁵	4.19	C ₂ O ₄ ²⁻	oxalate ion
hydrazoic acid	HN ₃	1.9 × 10 ⁻⁵	4.72	N ₃ ¹⁻	azide ion
acetic acid	HC ₂ H ₃ O ₂	1.8 × 10 ⁻⁵	4.74	C ₂ H ₃ O ₂ ¹⁻	acetate ion
carbonic acid	H ₂ CO ₃	4.3 × 10 ⁻⁷	6.37	HCO ₃ ¹⁻	hydrogen carbonate ion
hydrogen sulfite ion	HSO ₃ ¹⁻	1.0 × 10 ⁻⁷	7.00	SO ₃ ²⁻	sulfite ion
hydrosulfuric acid	H ₂ S	1.0 × 10 ⁻⁷	7.00	HS ¹⁻	hydrogen sulfide ion
dihydrogen phosphate ion	H ₂ PO ₄ ¹⁻	6.2 × 10 ⁻⁸	7.21	HPO ₄ ²⁻	hydrogen phosphate ion
hypochlorous acid	HClO	3.5 × 10 ⁻⁸	7.46	ClO ¹⁻	hypochlorite ion
ammonium ion	NH ₄ ¹⁺	5.6 × 10 ⁻¹⁰	9.25	NH ₃	ammonia
hydrocyanic acid	HCN	4.0 × 10 ⁻¹⁰	9.40	CN ¹⁻	cyanide ion
hydrogen carbonate ion	HCO ₃ ¹⁻	4.7 × 10 ⁻¹¹	10.33	CO ₃ ²⁻	carbonate ion
hydrogen phosphate ion	HPO ₄ ²⁻	4.8 × 10 ⁻¹³	12.32	PO ₄ ³⁻	phosphate ion
hydrogen sulfide ion	HS ¹⁻	1.3 × 10 ⁻¹³	12.89	S ²⁻	sulfide ion
water	H ₂ O	1.0 × 10 ⁻¹⁴	14.00	OH ¹⁻	hydroxide ion
ammonia	NH ₃	<< 10 ⁻¹⁴		NH ₂ ¹⁻	amide ion
hydroxide ion	OH ¹⁻	<< 10 ⁻¹⁴		O ²⁻	oxide ion