

Table of Conjugate Acid-Base Pairs

pK _a	acid	conj. base		pK _b	
- 10	<i>perchloric acid</i>	HClO ₄	ClO ₄ ⁻	<i>perchlorate</i>	24
- 10	<i>hydrogen iodide</i>	HI	I ⁻	iodide	24
-9	<i>hydrogen bromide</i>	HBr	Br ⁻	bromide	23
- 6	<i>hydrogen chloride</i>	HCl	Cl ⁻	chloride	20
- 3	sulphuric acid	H ₂ SO ₄	HSO ₄ ⁻	hydrogen sulphate	17
- 1.7	oxonium	H ₃ O ⁺	H ₂ O	water	15.7
- 1.3	nitric acid	HNO ₃	NO ₃ ⁻	nitrate	15.3
0	<i>chloric acid</i>	HClO ₃	ClO ₃ ⁻	<i>chlorate</i>	14.0
1.9	hydrogen sulphate	HSO ₄ ⁻	SO ₄ ²⁻	sulphate	12.1
1.9	<i>sulphurous acid</i>	H ₂ SO ₃	HSO ₃ ⁻	<i>hydrogen sulphite</i>	12.1
2.1	phosphoric acid	H ₃ PO ₄	H ₂ PO ₄ ⁻	dihydrogen phosphate	11.9
2.7	<i>fluoroacetic acid</i>	CH ₂ FCOOH	CH ₂ FCOO ⁻	<i>fluoroacetate</i>	11.3
2.8	<i>chloroacetic acid</i>	CH ₂ ClCOOH	CH ₂ ClCOO ⁻	<i>chloroacetate</i>	11.2
2.9	<i>bromoacetic acid</i>	CH ₂ BrCOOH	CH ₂ BrCOO ⁻	<i>bromoacetate</i>	11.1
3.1	<i>iodoacetic acid</i>	CH ₂ I ⁺ COOH	CH ₂ I ⁺ COO ⁻	<i>iodoacetate</i>	10.9
3.1	<i>hydrogen fluoride</i>	HF	F ⁻	fluoride	10.9
3.3	<i>nitrous acid</i>	HNO ₂	NO ₂ ⁻	<i>nitrite</i>	10.7
3.8	formic acid	HCOOH	HCOO ⁻	formiate	10.2
4.2	<i>benzoic acid</i>	C ₆ H ₅ COOH	C ₆ H ₅ COO ⁻	<i>benzoate</i>	9.8
4.8	acetic acid	CH ₃ COOH	CH ₃ COO ⁻	acetate	9.2
6.4	carbonic acid	H ₂ CO ₃	HCO ₃ ⁻	hydrogen carbonate	7.6
7.1	<i>hydrogen sulphide</i>	H ₂ S	HS ⁻	<i>hydrogen sulphide</i>	6.9
7.2	<i>hydrogen sulphite</i>	HSO ₃ ⁻	SO ₃ ²⁻	<i>sulphite</i>	6.8
7.2	dihydrogen phosphate	H ₂ PO ₄ ⁻	HPO ₄ ²⁻	hydrogen phosphate	6.8
7.2	<i>hypochlorous acid</i>	HClO	ClO ⁻	<i>hypochlorite</i>	6.8
9.2	ammonium	NH ₄ ⁺	NH ₃	ammonia	4.8
9.2	<i>hydrogen cyanide</i>	HCN	CN ⁻	<i>cyanide</i>	4.8
10.4	hydrogen carbonate	HCO ₃ ⁻	CO ₃ ²⁻	carbonate	3.6
11.6	<i>hydrogen peroxide</i>	H ₂ O ₂	HO ₂ ⁻	<i>hydrogen peroxide anion</i>	2.4
12.3	hydrogen phosphate	HPO ₄ ²⁻	PO ₄ ³⁻	phosphate	1.7
12.9	<i>hydrogen sulphide</i>	HS ⁻	S ²⁻	<i>sulphide</i>	1.1
15.7	water	H ₂ O	OH ⁻	hydroxide	- 1.7
24	hydroxide	OH ⁻	O ²⁻	<i>oxide</i>	- 10

