

Acid Dissociation Constants in Water at 25 °C

Name	Acid	Conjugate Base	K_a	pK_a
Hydroiodic	HI	I ⁻	$\sim 10^{11}$	~ -11
Hydrobromic	HBr	Br ⁻	$\sim 10^9$	~ -9
Perchloric	HClO ₄	ClO ₄ ⁻	$\sim 10^7$	~ -7
Hydrochloric	HCl	Cl ⁻	$\sim 10^7$	~ -7
Chloric	HClO ₃	ClO ₃ ⁻	$\sim 10^3$	~ -3
Sulfuric (1)	H ₂ SO ₄	HSO ₄ ⁻	$\sim 10^2$	~ -2
Nitric	HNO ₃	NO ₃ ⁻	~ 20	~ -1.3
Hydronium ion	H₃O⁺	H₂O	1	0.0
Urea acidium ion	NH ₂ CONH ₃ ⁺	(NH ₂) ₂ CO (urea)	6.6×10^{-1}	0.18
Iodic	HIO ₃	IO ₃ ⁻	1.6×10^{-1}	0.80
Oxalic (1)	H ₂ C ₂ O ₄	HC ₂ O ₄ ⁻	5.9×10^{-2}	1.23
Sulfurous (1)	H ₂ SO ₃	HSO ₃ ⁻	1.54×10^{-2}	1.81
Sulfuric (2)	HSO ₄ ⁻	SO ₄ ²⁻	1.2×10^{-2}	1.92
Chlorous	HClO ₂	ClO ₂ ⁻	1.1×10^{-2}	1.96
Phosphoric (1)	H ₃ PO ₄	H ₂ PO ₄ ⁻	7.52×10^{-3}	2.12
Arsenic (1)	H ₃ AsO ₄	H ₂ AsO ₄ ⁻	5.0×10^{-3}	2.30
Chloroacetic acid	CH ₂ ClCOOH	CH ₂ ClCOO ⁻	1.4×10^{-3}	2.85
Hydrofluoric acid	HF	F ⁻	6.6×10^{-4}	3.18
Nitrous	HNO ₂	NO ₂ ⁻	4.6×10^{-4}	3.34
Formic	HCOOH	HCOO ⁻	1.77×10^{-4}	3.75
Benzoic	C ₆ H ₅ COOH	C ₆ H ₅ COO ⁻	6.46×10^{-5}	4.19
Oxalic (2)	HC ₂ O ₄ ⁻	C ₂ O ₄ ²⁻	6.4×10^{-5}	4.19
Hydrazoic	HN ₃	N ₃ ⁻	1.9×10^{-5}	4.72
Acetic	CH ₃ COOH	CH ₃ COO ⁻	1.76×10^{-5}	4.75
Propionic	CH ₃ CH ₂ COOH	CH ₃ CH ₂ COO ⁻	1.34×10^{-5}	4.87
Pyridinium ion	HC ₅ H ₅ N ⁺	C ₅ H ₅ N	5.6×10^{-6}	5.25
Carbonic (1)	H ₂ CO ₃	HCO ₃ ⁻	4.3×10^{-7}	6.37
Sulfurous (2)	HSO ₃ ⁻	SO ₃ ²⁻	1.02×10^{-7}	6.91
Arsenic (2)	H ₂ AsO ₄ ⁻	HAsO ₄ ²⁻	9.3×10^{-8}	7.03
Hydrosulfuric	H ₂ S	HS ⁻	9.1×10^{-8}	7.04
Phosphoric (2)	H ₂ PO ₄ ⁻	HPO ₄ ²⁻	6.23×10^{-8}	7.21
Hypochlorous	HClO	ClO ⁻	3.0×10^{-8}	7.53
Hydrocyanic	HCN	CN ⁻	6.17×10^{-10}	9.21
Ammonium ion	NH ₄ ⁺	NH ₃	5.6×10^{-10}	9.25
Carbonic (2)	HCO ₃ ⁻	CO ₃ ²⁻	4.8×10^{-11}	10.32
Methylammonium ion	CH ₃ NH ₃ ⁺	CH ₃ NH ₂	2.3×10^{-11}	10.64
Arsenic (3)	HAsO ₄ ²⁻	AsO ₄ ³⁻	3.0×10^{-12}	11.53
Hydrogen peroxide	H ₂ O ₂	HO ₂ ⁻	2.4×10^{-12}	11.62
Phosphoric (3)	HPO ₄ ²⁻	PO ₄ ³⁻	2.2×10^{-13}	12.67
Water	H₂O	OH⁻	1.0×10^{-14}	14.00
Methanol	CH ₃ OH	CH ₃ O ⁻	$\sim 10^{-18}$	~ 18
Ammonia	NH ₃	NH ₂ ⁻	$\sim 10^{-34}$	~ 34

*Strong acid in Water, **Weak acids in Water, ***Not an acid in water