

Acid Dissociation Constants at 25°C

Acid	Formula	K_1	K_2	K_3
Acetic acid	CH_3COOH	1.75×10^{-5}		
Ammonium ion	NH_4^+	5.70×10^{-10}		
Anilinium ion	$\text{C}_6\text{H}_5\text{NH}_3^+$	2.51×10^{-5}		
Arsenic acid	H_3AsO_4	5.8×10^{-3}	1.1×10^{-7}	3.2×10^{-12}
Arsenous acid	H_3AsO_3	5.1×10^{-10}		
Benzoic acid	$\text{C}_6\text{H}_5\text{COOH}$	6.28×10^{-5}		
Boric acid	H_3BO_3	5.81×10^{-10}		
1-Butanoic acid	$\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$	1.52×10^{-5}		
Carbonic acid	H_2CO_3	4.45×10^{-7}	4.69×10^{-11}	
	$\text{CO}_2(aq)$	4.2×10^{-7}	4.69×10^{-11}	
Chloroacetic acid	ClCH_2COOH	1.36×10^{-3}		
Citric acid	$\text{HOOC(OH)C(CH}_2\text{COOH)}_2$	7.45×10^{-4}	1.73×10^{-5}	4.02×10^{-7}
Dimethyl ammonium ion	$(\text{CH}_3)_2\text{NH}_2^+$	1.68×10^{-11}		
Ethanol ammonium ion	$\text{HOC}_2\text{H}_4\text{NH}_3^+$	3.18×10^{-10}		
Ethyl ammonium ion	$\text{C}_2\text{H}_5\text{NH}_3^+$	2.31×10^{-11}		
Ethylene diammonium ion	$^{+}\text{H}_3\text{NCH}_2\text{CH}_2\text{NH}_3^+$	1.42×10^{-7}	1.18×10^{-10}	
Formic acid	HCOOH	1.80×10^{-4}		
Fumaric acid	$\text{trans-HOOCCH:CHCOOH}$	8.85×10^{-4}	3.21×10^{-5}	
Glycolic acid	HOCH_2COOH	1.47×10^{-4}		
Hydrazinium ion	H_2NNH_3^+	1.05×10^{-8}		
Hydrazoic acid	HN_3	2.2×10^{-5}		
Hydrogen cyanide	HCN	6.2×10^{-10}		
Hydrogen fluoride	HF	6.8×10^{-4}		
Hydrogen peroxide	H_2O_2	2.2×10^{-12}		
Hydrogen sulfide	H_2S	9.6×10^{-8}	1.3×10^{-14}	
Hydroxyl ammonium ion	HONH_3^+	1.10×10^{-6}		
Hypochlorous acid	HOCl	3.0×10^{-8}		
Iodic acid	HIO_3	1.7×10^{-1}		
Lactic acid	$\text{CH}_3\text{CHOHCOOH}$	1.38×10^{-4}		
Maleic acid	cis-HOOCCH:CHCOOH	1.3×10^{-2}	5.9×10^{-7}	
Malic acid	$\text{HOOCCHOHCH}_2\text{COOH}$	3.48×10^{-4}	8.00×10^{-6}	
Malonic acid	$\text{HOOCCH}_2\text{COOH}$	1.42×10^{-3}	2.01×10^{-6}	
Mandelic acid	$\text{C}_6\text{H}_5\text{CHOHCOOH}$	4.0×10^{-4}		
Methyl ammonium ion	CH_3NH_3^+	2.3×10^{-11}		
Nitrous acid	HNO_2	7.1×10^{-4}		
Oxalic acid	HOOCOOH	5.60×10^{-2}	5.42×10^{-5}	
Periodic acid	H_5IO_6	2×10^{-2}	5×10^{-9}	
Phenol	$\text{C}_6\text{H}_5\text{OH}$	1.00×10^{-10}		
Phosphoric acid	H_3PO_4	7.11×10^{-3}	6.32×10^{-8}	4.5×10^{-13}
Phosphorous acid	H_3PO_3	3×10^{-2}	1.62×10^{-7}	
<i>o</i> -Phthalic acid	$\text{C}_6\text{H}_4(\text{COOH})_2$	1.12×10^{-3}	3.91×10^{-6}	
Picric acid	$(\text{NO}_2)_3\text{C}_6\text{H}_2\text{OH}$	4.3×10^{-1}		
Piperidinium ion	$\text{C}_5\text{H}_{11}\text{NH}^+$	7.50×10^{-12}		
Propanoic acid	$\text{CH}_3\text{CH}_2\text{COOH}$	1.34×10^{-5}		

continues

Acid	Formula	K_1	K_2	K_3
Pyridinium ion	$\text{C}_5\text{H}_5\text{NH}^+$	5.90×10^{-6}		
Pyruvic acid	CH_3COCOOH	3.2×10^{-3}		
Salicylic acid	$\text{C}_6\text{H}_4(\text{OH})\text{COOH}$	1.06×10^{-3}		
Succinic acid	$\text{HOOCCH}_2\text{CH}_2\text{COOH}$	6.21×10^{-5}	2.31×10^{-6}	
Sulfamic acid	$\text{H}_2\text{NSO}_3\text{H}$	1.03×10^{-1}		
Sulfuric acid	H_2SO_4	Strong	1.02×10^{-2}	
Sulfurous acid	H_2SO_3	1.23×10^{-2}	6.6×10^{-8}	
Tartaric acid	$\text{HOOC(CHOH)}_2\text{COOH}$	9.20×10^{-4}	4.31×10^{-5}	
Thiocyanic acid	HSCN	0.13		
Thiosulfuric acid	$\text{H}_2\text{S}_2\text{O}_3$	0.3	2.5×10^{-2}	
Trichloroacetic acid	Cl_3CCOOH	3		
Trimethyl ammonium ion	$(\text{CH}_3)_3\text{NH}^+$	1.58×10^{-10}		