

## Acid Dissociation Constants (25°C)

Name	Formula	K <sub>a1</sub>	K <sub>a2</sub>	K <sub>a3</sub>
Acetic	HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	1.8×10 <sup>-5</sup>		
Acetylsalicylic	HC <sub>9</sub> H <sub>7</sub> O <sub>4</sub>	3.3×10 <sup>-4</sup>		
Adipic	H <sub>2</sub> C <sub>6</sub> H <sub>8</sub> O <sub>4</sub>	3.9×10 <sup>-5</sup>	3.9×10 <sup>-6</sup>	
Arsenic	H <sub>3</sub> AsO <sub>4</sub>	5.5×10 <sup>-3</sup>	1.7×10 <sup>-7</sup>	5.1×10 <sup>-12</sup>
Arsenous	H <sub>3</sub> AsO <sub>3</sub>	5.1×10 <sup>-10</sup>		
Ascorbic	HC <sub>6</sub> H <sub>7</sub> O <sub>6</sub>	8.0×10 <sup>-5</sup>	1.6×10 <sup>-12</sup>	
Benzoic	HC <sub>7</sub> H <sub>5</sub> O <sub>2</sub>	6.5×10 <sup>-5</sup>		
Boric	H <sub>3</sub> BO <sub>3</sub>	5.4×10 <sup>-10</sup>		
Butanoic	HC <sub>4</sub> H <sub>7</sub> O <sub>2</sub>	1.5×10 <sup>-5</sup>		
Carbonic	H <sub>2</sub> CO <sub>3</sub>	4.3×10 <sup>-7</sup>	5.6×10 <sup>-11</sup>	
Chloroacetic	HC <sub>2</sub> H <sub>2</sub> O <sub>2</sub> Cl	1.4×10 <sup>-3</sup>		
Chlorous	HClO <sub>2</sub>	1.1×10 <sup>-2</sup>		
Citric	H <sub>3</sub> C <sub>6</sub> H <sub>5</sub> O <sub>7</sub>	7.4×10 <sup>-4</sup>	1.7×10 <sup>-5</sup>	4.0×10 <sup>-7</sup>
Chromic	H <sub>2</sub> CrO <sub>4</sub>	1.5×10 <sup>-1</sup>	3.2×10 <sup>-7</sup>	
Cyanic	HCNO	2×10 <sup>-4</sup>		
Formic	HCHO <sub>2</sub>	1.8×10 <sup>-4</sup>		
Hydrazoic	HN <sub>3</sub>	2.5×10 <sup>-5</sup>		
Hydrocyanic	HCN	4.9×10 <sup>-10</sup>		
Hydrofluoric	HF	3.5×10 <sup>-4</sup>		
Hydrogen peroxide	H <sub>2</sub> O <sub>2</sub>	2.4×10 <sup>-12</sup>		
Hydrosulfuric acid	H <sub>2</sub> S	8.9×10 <sup>-8</sup>	1.×10 <sup>-19</sup>	
Hydrotelluric acid	H <sub>2</sub> Te	2.3×10 <sup>23</sup>	1.6×10 <sup>-11</sup>	
Hypochlorous	HClO	2.9×10 <sup>-8</sup>		
Iodic	HIO <sub>3</sub>	1.7×10 <sup>-1</sup>		
Lactic	HC <sub>3</sub> H <sub>5</sub> O <sub>3</sub>	1.4×10 <sup>-4</sup>		
Maleic	H <sub>2</sub> C <sub>4</sub> H <sub>2</sub> O <sub>4</sub>	1.2×10 <sup>-2</sup>	5.9×10 <sup>-7</sup>	
Malonic	H <sub>2</sub> C <sub>3</sub> H <sub>2</sub> O <sub>4</sub>	1.5×10 <sup>-3</sup>	2.0×10 <sup>-6</sup>	
Nitrous	HNO <sub>2</sub>	4.5×10 <sup>-4</sup>		
Oxalic	H <sub>2</sub> C <sub>2</sub> O <sub>4</sub>	5.9×10 <sup>-2</sup>	6.4×10 <sup>-5</sup>	
Paraperiodic acid	H <sub>5</sub> IO <sub>6</sub>	2.8×10 <sup>-2</sup>	5.3×10 <sup>-9</sup>	
Phenol	HC <sub>6</sub> H <sub>5</sub> O	1.3×10 <sup>-10</sup>		
Phosphoric	H <sub>3</sub> PO <sub>4</sub>	7.5×10 <sup>-3</sup>	6.2×10 <sup>-8</sup>	4.2×10 <sup>-13</sup>
Phosphorous	H <sub>3</sub> PO <sub>3</sub>	5×10 <sup>-2</sup>	2.0×10 <sup>-7</sup>	
Propanoic	HC <sub>3</sub> H <sub>5</sub> O <sub>2</sub>	1.3×10 <sup>-5</sup>		
Pyrophosphoric	H <sub>4</sub> P <sub>2</sub> O <sub>7</sub>	1.2×10 <sup>-1</sup>	7.9×10 <sup>-3</sup>	2.0×10 <sup>-7</sup>
Pyruvic	HC <sub>3</sub> H <sub>3</sub> O <sub>3</sub>	4.1×10 <sup>-3</sup>		
Selenic Acid	H <sub>2</sub> SeO <sub>4</sub>	Strong Acid	2.2×10 <sup>-2</sup>	
Selenous	H <sub>2</sub> SeO <sub>3</sub>	2.4×10 <sup>-3</sup>	4.8×10 <sup>-9</sup>	
Sulfuric	H <sub>2</sub> SO <sub>4</sub>	Strong Acid	1.2×10 <sup>-2</sup>	
Sulfurous	H <sub>2</sub> SO <sub>3</sub>	1.6×10 <sup>-2</sup>	6.4×10 <sup>-8</sup>	
Tartaric	H <sub>2</sub> C <sub>4</sub> H <sub>4</sub> O <sub>6</sub>	1.0×10 <sup>-3</sup>	4.6×10 <sup>-5</sup>	
Trichloroacetic	HC <sub>2</sub> Cl <sub>3</sub> O <sub>2</sub>	2.2×10 <sup>-1</sup>		
Trifluoroacetic	HC <sub>2</sub> F <sub>3</sub> O <sub>2</sub>	3.0×10 <sup>-1</sup>		

## Base Hydrolysis Constants (25°C)

Name	Formula	$K_b$
Ammonia	$\text{NH}_3$	$1.8 \times 10^{-5}$
Aniline	$\text{C}_6\text{H}_5\text{NH}_2$	$4.3 \times 10^{-10}$
Codeine	$\text{C}_{18}\text{H}_{21}\text{NO}_3$	$1.6 \times 10^{-6}$
Diethylamine	$(\text{C}_2\text{H}_5)_2\text{NH}$	$6.9 \times 10^{-4}$
Dimethylamine	$(\text{CH}_3)_2\text{NH}$	$5.4 \times 10^{-4}$
Ethylamine	$\text{C}_2\text{H}_5\text{NH}_2$	$6.4 \times 10^{-4}$
Ethylenediamine	$\text{NH}_2\text{C}_2\text{H}_4\text{NH}_2$	$5.2 \times 10^{-4}$
Hydrazine	$\text{H}_2\text{NNH}_2$	$1.3 \times 10^{-6}$
Hydroxylamine	$\text{HONH}_2$	$1.1 \times 10^{-8}$
Ketamine	$\text{C}_{13}\text{H}_{16}\text{ClNO}$	$3 \times 10^{-7}$
Methylamine	$\text{CH}_3\text{NH}_2$	$4.4 \times 10^{-4}$
Morphine	$\text{C}_{17}\text{N}_{19}\text{NO}_3$	$1.6 \times 10^{-6}$
Nicotine	$\text{C}_{10}\text{N}_{14}\text{N}_2$	$1.6 \times 10^{-6}$
Piperidine	$\text{C}_5\text{H}_{10}\text{NH}$	$1.33 \times 10^{-3}$
Propylamine	$\text{C}_3\text{H}_7\text{NH}_2$	$3.7 \times 10^{-4}$
Pyridine	$\text{C}_5\text{H}_5\text{N}$	$1.7 \times 10^{-9}$
Strychnine	$\text{C}_{21}\text{H}_{22}\text{N}_2\text{O}_2$	$1.8 \times 10^{-6}$
Triethylamine	$(\text{C}_2\text{H}_5)_3\text{N}$	$5.6 \times 10^{-4}$
Trimethylamine	$(\text{CH}_3)_3\text{N}$	$6.4 \times 10^{-5}$
Urea	$\text{NH}_2\text{CONH}_2$	$1.5 \times 10^{-14}$