

Acid Dissociation Constants,  $K_a$  at 25°C

(calculated from  $pK_a$  values in *Handbook of Chemistry & Physics*, CRC, 85<sup>th</sup> ed.)

Name	Formula	$K_{a1}$	$K_{a2}$	$K_{a3}$
Acetic	$HC_2H_3O_2$	$1.8 \times 10^{-5}$		
Ascorbic	$HC_6H_7O_6$	$9.1 \times 10^{-5}$		
Benzoic	$HC_7H_5O_2$	$6.5 \times 10^{-5}$		
Carbonic	$H_2CO_3$	$4.3 \times 10^{-7}$	$5.6 \times 10^{-11}$	
Chloroacetic	$HC_2H_2O_2Cl$	$1.3 \times 10^{-3}$		
Citric	$H_3C_6H_5O_7$	$7.4 \times 10^{-4}$	$1.7 \times 10^{-5}$	$4.0 \times 10^{-7}$
Cyanic	$HCNO$	$7.4 \times 10^{-4}$		
Formic	$HCHO_2$	$1.8 \times 10^{-4}$		
Hydrocyanic	$HCN$	$4.9 \times 10^{-10}$		
Hydrofluoric	$HF$	$6.8 \times 10^{-4}$		
Hydrosulfuric	$HS$	$8.9 \times 10^{-8}$		
Hypochlorous	$HClO$	$3.0 \times 10^{-8}$		
Hypoiodous	$HIO$	$3 \times 10^{-11}$		
Lactic	$HC_3H_5O_3$	$1.4 \times 10^{-4}$		
Nitrous	$HNO_2$	$4.5 \times 10^{-4}$		
Phosphoric	$H_3PO_4$	$6.9 \times 10^{-3}$	$6.2 \times 10^{-8}$	$4.8 \times 10^{-13}$
Propionic	$HC_3H_5O_2$	$1.3 \times 10^{-5}$		
Sulfuric	$H_2SO_4$	Strong	$1.0 \times 10^{-2}$	

Base Dissociation Constants,  $K_b$  at 25°C

(calculated from  $pK_a$  values in *Handbook of Chemistry & Physics*, CRC, 85<sup>th</sup> ed.)

Name	Formula	$K_b$
Ammonia	$NH_3$	$1.8 \times 10^{-5}$
Aniline	$C_6H_5NH_2$	$7.7 \times 10^{-10}$
Ethylamine	$C_2H_5NH_2$	$4.5 \times 10^{-4}$
Methylamine	$CH_3NH_2$	$4.5 \times 10^{-4}$