

Sdgsgs



**ASSIGN
BUSTER**

Acid and Base Ionization Constants			
Acid Ionization Constant (Ka) - the equilibrium constant for a weak acid. Acid Ionization Constants			
Substance	Formula	Ka	
Acetic Acid	HC ₂ H ₃ O ₂	1.7 × 10 ⁻⁵	
Benzoic Acid	HC ₇ H ₅ O ₂	6.3 × 10 ⁻⁵	
Boric Acid	H ₃ BO ₃	5.9 × 10 ⁻¹⁰	
Carbonic Acid	H ₂ CO ₃	4.3 × 10 ⁻⁷	
HCO ₃ ⁻		4.8 × 10 ⁻¹¹	
Cyanic Acid	HCNO	4.9 × 10 ⁻¹⁰	
Formic Acid	HCHO ₂	1.7 × 10 ⁻⁴	
Hydrocyanic Acid	HCN	4.9 × 10 ⁻¹⁰	
Hydrofluoric Acid	HF	6.8 × 10 ⁻⁴	
Hydrogen Sulfate ion	HSO ₄ ⁻	1.1 × 10 ⁻²	
Hydrogen Sulfide	H ₂ S	8.9 × 10 ⁻⁸	
HS ⁻		1.2 × 10 ⁻¹³	
Hypochlorous Acid	HClO	3.5 × 10 ⁻⁸	
Nitrous Acid	HNO ₂	4.5 × 10 ⁻⁴	
Oxalic Acid	H ₂ C ₂ O ₄	5.6 × 10 ⁻²	
HC ₂ O ₄ ⁻		5.1 × 10 ⁻⁵	
Phosphoric Acid	H ₃ PO ₄	6.9 × 10 ⁻³	
H ₂ PO ₄ ⁻		6.2 × 10 ⁻⁸	
HPO ₄ ²⁻		4.8 × 10 ⁻¹³	
Phosphorus Acid	H ₂ PHO ₃	1.6 × 10 ⁻²	
H ₂ PHO ₃		7.0 × 10 ⁻⁷	
Propionic Acid	HC ₃ H ₅ O ₂	1.3 × 10 ⁻⁵	
Pyruvic Acid	HC ₃ H ₃ O ₃	1.4 × 10 ⁻⁴	
Sulfurous Acid	H ₂ SO ₃	1.3 × 10 ⁻²	
HSO ₃ ⁻		6.3 × 10 ⁻⁸	
Base Ionization Constant (Kb) - the equilibrium constant for a weak base. Base Ionization Constants			
Substance	Formula	Kb	
Ammonia	NH ₃	1.8 × 10 ⁻⁵	
Aniline	C ₆ H ₅ NH ₂	4.2 × 10 ⁻¹⁰	
Dimethylamine	(CH ₃) ₂ NH	5.1 × 10 ⁻⁴	
Ethylamine	C ₂ H ₅ NH ₂	4.7 × 10 ⁻⁴	
Hydrazine	N ₂ H ₄	1.7 × 10 ⁻⁶	
Hydroxylamine	NH ₂ OH	1.1 × 10 ⁻⁸	
Methylamine	CH ₃ NH ₂	4.4 × 10 ⁻⁴	
Pyridine	C ₅ H ₅ N	1.4 × 10 ⁻⁹	
Urea	NH ₂ CONH ₂	1.5 × 10 ⁻¹⁴	