

Stock Concentrations of Common Acids

Acid	Chemical Formula	Molecular Mass (g/mol)	Molarity (moles/liter)	Percent Concentration by Mass	Density (g/ml)
acetic acid, dilute	HC ₂ H ₃ O ₂	60.05	6.27	36.0	1.05
acetic acid, glacial	HC ₂ H ₃ O ₂	60.05	17.4	99.5	1.05
butyric acid	HC ₄ H ₇ O ₂	88.1	10.3	95.0	0.96
formic acid	HCO ₂ H	46.02	23.4	90.0	1.20
hydrobromic acid	HBr	80.92	8.89	48.0	1.50
hydrochloric acid	HCl	36.5	11.6	36.0	1.18
hydrocyanic acid	HCN	27.03	25.0	36.0	0.697
hydrofluoric acid	HF	20.01	32.1	97.0	1.167
hydroiodic acid	HI	127.9	7.57	57.0	1.70
hypophosphorous acid	H ₃ PO ₂	66.0	9.47	55.0	1.25
nitric acid	HNO ₃	63.02	16.0	71.0	1.42
perchloric acid	HClO ₄	100.5	11.65	70.0	1.67
phosphoric acid	H ₃ PO ₄	98.0	14.7	85.0	1.70
sulfuric acid	H ₂ SO ₄	98.1	18.0	96.0	1.84
sulfurous acid	H ₂ SO ₃	82.1	0.74	6	1.02