



Concentrations of common Acids and Bases

CHEMICAL DESCRIPTION	FORMULA WEIGHT	SPECIFIC GRAVITY	MOLARITY	NORMALITY	REAGENT PERCENT (w/w)	TO PREPARE 1l OF 1 MOLAR SOLUTION
Acetic Acid glacial (CH ₃ COOH)	60.05	1.05	17.4	17.4	99.7%	57.5ml
Ammonium Hydroxide (NH ₄ OH)	35.05	0.90	14.8	14.8	57%	69.0ml
Formic acid (HCOOH)	46.03	1.29	23.6	23.6	90.5%	42.5ml
Hydrochloric Acid (HCl)	36.46	1.19	12.1	12.1	37.0%	82.5ml
Hydrofluoric Acid (HF)	20.01	1.18	28.9	28.9	49.0%	34.5ml
Nitric Acid (HNO ₃)	63.01	1.42	15.8	15.8	70%	63.0ml
Perchloric Acid 70% (HClO ₄)	100.46	1.67	11.7	11.7	70%	85.5ml
Perchloric Acid 60% (HClO ₄)	100.46	1.54	9.1	9.1	60.0%	110.0ml
Phosphoric acid (H ₃ PO ₄)	98.00	1.70	14.8	14.8	85.0%	67.5ml
Potassium Hydroxide (KOH)	56.11	1.46	11.7	11.7	45.0%	85.5ml
Sodium Hydroxide (NaOH)	40.01	1.53	19.3	19.3	50%	52.3ml
Sulphuric Acid (H ₂ SO ₄)	98.08	1.84	18.0	36.0	96.0%	55.5ml