

Commonly Used Acids and Bases

Proton transfer steps (protonation or deprotonation reactions) are an extremely common way to initiate chemical reactions. Because of this, chemists frequently add acids or bases (often in sub-stoichiometric quantities) to execute a variety of useful reactions. What do some commonly used acids and bases look like in practice? We've collected the common ones for you on this page.

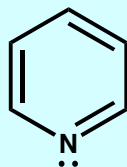
strong inorganic acids

HCl hydrochloric acid

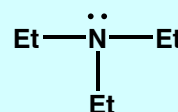
H₂SO₄ sulfuric acid

HNO₃ nitric acid

weak nitrogen bases



pyridine
(Py)



triethylamine
(TEA)

oxygen bases

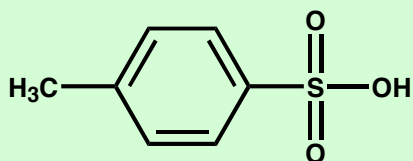
NaOH sodium hydroxide

NaOMe sodium methoxide

NaOEt sodium ethoxide

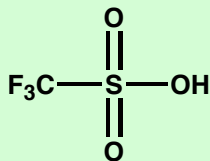
KOtBu potassium tert-butoxide

organic acids



p-toluenesulfonic acid
(PTSA, TsOH)

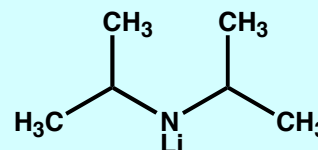
CH₃COOH
acetic acid



trifluoromethanesulfonic acid
(triflic acid, TfOH)

strong nitrogen bases

NaNH₂
sodium amide



lithium diisopropylamide
(LDA)

strong bases

NaH
sodium hydride

CH₃CH₂CH₂CH₂Li
butyllithium
(nBuLi)

