

## pKa Table: Effect of electronegativity and resonance

	Acid	pKa	Conjugate Base
	$\text{HCl}$	<b>-7</b>	$\text{Cl}^-$
	$\text{H}_2\text{SO}_4$	-4	$\text{HSO}_4^-$
	$\text{HNO}_3$	-2	$\text{NO}_3^-$
	$\text{CH}_3\text{CH}_2\overset{\text{H}}{\underset{\oplus}{\text{O}}}-\text{H}$	-2	$\text{CH}_3\text{CH}_2\text{OH}$
	$\text{H}-\overset{\text{H}}{\underset{\oplus}{\text{O}}}-\text{H}$	<b>-2</b>	$\text{H}_2\text{O}$
		<b>5</b>	
	$\text{H}-\overset{\text{H}}{\underset{\oplus}{\text{N}}}-\text{H}$	<b>9 (10)</b>	$\text{H}_3\text{N}$
		<b>10</b>	 phenoxide <div style="border: 1px solid black; padding: 5px; display: inline-block;"> e.g., sodium phenoxide</div>
		11	 e.g. [only most stable resonance shown here]
	$\text{HO}-\text{H}$ water	<b>15.7 (15)</b>	$\text{HO}^-$ hydroxide $\text{HO}^- \text{Na}^+$ e.g., sodium hydroxide
	$\text{CH}_3\text{CH}_2\text{OH}$ ethanol	<b>16 (15)</b>	$\text{CH}_3\text{CH}_2\text{O}^-$ ethanoxide <div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>\text{CH}_3\text{CH}_2\text{O}^- \text{Na}^+</math> e.g., sodium ethoxide</div>
		20	 enolate  e.g., lithium enolate [only most stable resonance shown here]
	$\text{H}-\text{C}\equiv\text{C}-\text{H}$ alkyne	<b>25</b>	$\text{H}-\text{C}\equiv\text{C}^-$ acetylide <div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>\text{H}-\text{C}\equiv\text{C} \text{Na}^+</math> e.g., sodium acetylide</div>
	$\text{H}_2\text{N}-\text{H}$ ammonia	<b>35</b>	$\text{H}_2\text{N}^-$ amide <div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>\text{H}_2\text{N}^- \text{Na}^+</math> e.g., sodium amide</div>
	$\text{H}-\text{H}$ Hydrogen	35	$\text{H}^-$ Hydride $\text{H}^- \text{Na}^+$ e.g., sodium hydride

