

Baking Soda vs Baking Powder (vsdiff.com)

Property	Baking Soda	Baking Powder
Primary chemical	NaHCO₃ (sodium bicarbonate)	Mixture of NaHCO₃ + acid salt(s) + filler (often starch)
How it releases CO ₂	Reacts with added <i>acid</i> (e.g., vinegar, buttermilk) when wet/heat applied	Contains its own <i>acid</i> ; single- or double-acting releases CO ₂ on mixing and/or on heating
Typical recipe role	Neutralize acidity; fast-rise leavening; browning promoter	All-in-one leavening for neutral batters; convenient for cakes and quick breads
pH effect on batter	Raises pH to approx. 8-9 (alkaline)	Generally closer to <i>neutral</i> but depends on formulation
Practical potency	Strong by volume; small amounts change flavor	Weaker per teaspoon; contains balancing acidity
Approx. shelf life (opened)	Long-lived; efficacy stable years if dry	Typically ~ 6-12 months before potency drops

Source: <https://vsdiff.com/baking-soda-vs-baking-powder/>