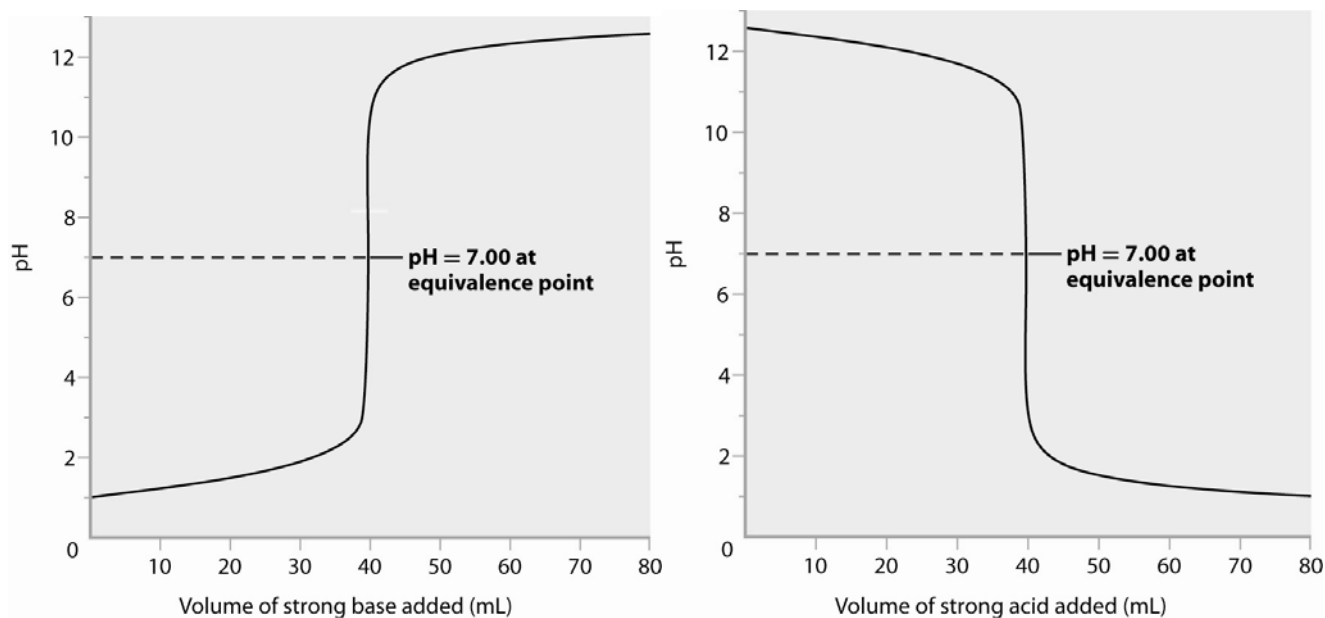


pH Titration Curves and Indicators



The graph on the left shows the pH curve obtained when a strong base is added to a strong acid. The reaction mixture starts off very acidic and becomes very basic. The opposite is true when a strong acid is added to a strong base, as shown in the graph on the right.

Indicators Suitable for Strong Acid-Strong Base Titrations

Indicator	pH range	Colour change as pH increases
bromocresol green	3.8–5.4	yellow to blue
methyl red	4.8–6.0	red to yellow
chlorophenol red	5.2–6.8	yellow to red
bromothymol blue	6.0–7.6	yellow to blue
phenol red	6.6–8.0	yellow to red
phenolphthalein	8.2–10.0	colourless to pink