

Acid-Base Indicators

| indicator | pH transition | acid form's color | base form's color |
|-------------------|---------------|-------------------|-------------------|
| thymol blue | 1.1–2.6 | red | yellow |
| methyl orange | 3.0–4.3 | red | yellow–orange |
| bromocresol green | 2.9–5.6 | yellow | blue |
| bromothymol blue | 6.1–7.6 | yellow | blue |
| thymol blue | 8.0–9.6 | yellow | blue |
| thymolphthalein | 9.5–10.5 | colorless | blue |
| indigo carmine | 11.4–13.0 | blue | yellow |

In a pH transition region, an indicator's color is a blend of the color of its acid form and the color of its base form. For example, a solution containing bromocresol green is yellow when the pH is less than 2.9 and blue when the pH is greater than 5.6; between a pH of 2.9 and a pH of 5.6, the solution changes from yellow to blue passing through shades of yellow-green, green, and blue-green.

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In a pH transition region, an indicator's color is a blend of the color of its acid form and the color of its base form. For example, a solution containing bromocresol green is yellow when the pH is less than 2.9 and blue when the pH is greater than 5.6; between a pH of 2.9 and a pH of 5.6, the solution changes from yellow to blue passing through shades of yellow-green, green, and blue-green.