Marks
2

- Codeine, a cough suppressant extracted from crude opium, is a weak base with a $pK_b = 5.79$. What is the pH of a 0.020 M solution of codeine?

Answer:

3

- A buffer solution is formed with 0.250 M CH_3COOH and 0.350 M CH_3COONa. What is the pH of this buffer solution? (K_a of acetic acid $= 1.8 \times 10^{-5}$ M.)

Answer:

Calculate the pH of the solution formed when 6.3×10^{-2} mol of NaOH is added to 1.0 L of the buffer solution.

Answer: