

Marks
7

- Solution A consists of a 0.020 M aqueous solution of aspirin (acetylsalicylic acid, $C_9H_8O_4$) at 25 °C. Calculate the pH of Solution A. The pK_a of aspirin is 3.52.

Answer:

At 25 °C, 1.00 L of Solution B consists of 4.04 g of sodium acetylsalicylate ($NaC_9H_7O_4$) dissolved in water. Calculate the pH of Solution B.

Answer:

Solution B (200.0 mL) is mixed with Solution A (400.0 mL) and water (200.0 mL) to give Solution C. Calculate the pH of Solution C after equilibration at 25 °C.

Answer:

If you wanted to adjust the pH of Solution C to be exactly equal to 3.00, which component in the mixture would you need to increase in concentration?