Marks 8

- Solution A consists of a 0.020 M aqueous solution of propionic acid, $C_3H_6O_2$, at 25 °C. Calculate the pH of Solution A. The pK_a of propionic acid is 4.87.

Answer:

At 25 °C, 1.00 L of Solution B consists of 2.24 g of potassium propionate ($KC_3H_5O_2$) dissolved in water. Calculate the pH of Solution B.

Answer:

Solution B (1.00 L) is poured into Solution A (1.00 L) and allowed to equilibrate at 25 °C to give Solution C. Calculate the pH of Solution C.

Answer:

If you wanted to adjust the pH of Solution C to be exactly equal to 5.00, which component in the mixture would you need to increase in concentration?