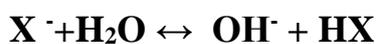
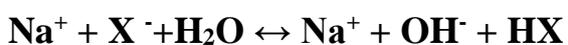
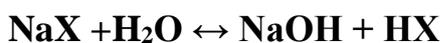


“Answer on Question #71740, Chemistry / General Chemistry”

K_a for HX is 7.5×10^{-12} . What is the pH of a 0.15 M aqueous solution of NaX?



$$K = \frac{K_{\text{H}_2\text{O}}}{K_a} = \frac{10^{-14}}{7.5 \times 10^{-12}} = 1.33 \cdot 10^{-3}$$

$$[\text{OH}^-] = \sqrt{K \cdot C} = \sqrt{1.33 \cdot 10^{-3} \cdot 0.15} = 0,0141$$

$$\text{pH} = 14 + \lg[\text{OH}^-] = 12.15$$

Answer provided by AssignmentExpert.com