

Answer on Question #50479, Chemistry, Other

A titration of 15.0 cm³ of household ammonia, NH₃, required 3870 cm³ of 8.0 M HCl. Calculate the molarity of the ammonia.

Solution:



$$\begin{aligned}n &= C \times V \\n(\text{NH}_3) &= n(\text{HCl}) \\C_1 \times V_1 &= C_2 \times V_2 \\C_2 &= \frac{C_1 \times V_1}{V_2} = \frac{3870 \text{ cm}^3 \times 8.0 \text{ M}}{15 \text{ cm}^3} = 2064 \text{ M}\end{aligned}$$

Answer:

2064 M it is impossible to have such concentration! In Question is a mistake.

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