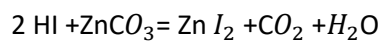


Answer on Question 85969 in General Chemistry

$$C_M(\text{HI}) = 0.516 \text{ M}$$

$$.m (\text{ZnCO}_3) = 9.95 \text{ g}$$

$$V (\text{HI}) = ?$$



Find the amount of substance of ZnCO_3

$$.n = \frac{m}{M_r} = \frac{9.95}{125} = 0.08 \text{ mol}$$

$$M_r (\text{ZnCO}_3) = A_r (\text{Zn}) + A_r (\text{C}) + 3A_r (\text{O}) = 65 + 12 + 3 \times 16 = 125$$

$$.n (\text{HI}) = 2 n (\text{ZnCO}_3) = 2 \times 0.08 = 0.16$$

$$C_M = \frac{n}{V}$$

$$\text{From which } V = \frac{n}{C_M} = \frac{0.16}{0.516} = 0.3125 \text{ L} = 312.5 \text{ mL}$$

Answer provided by www.AssignmentExpert.com