

Answer on Question 77075 in General Chemistry

$$m(\text{CaCl}_2) = 10.0 \text{ g}$$

$$V(\text{H}_2\text{O}) = 500 \text{ mL} = 0.5 \text{ L}$$

$$C_M = ?$$

Solution:

$$C_M = \frac{m(\text{CaCl}_2)}{M_r(\text{CaCl}_2) \times V} = \frac{10}{111 \times 0.5} = 0.18 \text{ M}$$

$$\text{Find } M_r(\text{CaCl}_2) = A_r(\text{Ca}) + 2A_r(\text{Cl}) = 40 + 2 \times 35.5 = 111$$

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