Answer on Question #75123, Chemistry / General Chemistry

What is the calculated molarity of 2.5 L of a solution containing 2.34 g of dissolved NaCl?

Solution

Find the amount of NaCl in 2.5L of a solution:

$\nu = \frac{m}{M} = \frac{2.34}{58.5} = 0.04$ (mole)

Find the molarity:

0.04 mole --- 2.5L

X mole --- 1L

$C = \frac{0.04}{2.5} =$ **0.016 (mole/L)**

Answer

0.016 mole/L **–** the calculated molarity of 2.5 L of a solution containing 2.34 g of dissolved NaCl.