

Answer on Question #70900 – Chemistry – General Chemistry

Task

How many grams of NaCl are required to prepare 200 mL of a solution of 0.2 M NaCl?
(molar mass of NaCl=58.44g/mol)

Solution

$$c(\text{NaCl}) = 0.2 \text{ mol/l} \Rightarrow v(\text{NaCl}) = c \cdot V = 0.2 \cdot 1 = 0.2 \text{ mol.}$$

$$m(\text{NaCl}) = v \cdot M = 0.2 \cdot 58.44 = 11.688 \text{ g} \approx 11.7 \text{ g.}$$

Answer

11.7 g.

Answer provided by <https://www.AssignmentExpert.com>