Answer to the Question 62983

You need to make an aqueous solution of 0.245 M potassium chloride for an experiment in lab, using a 250 mL volumetric flask. How much solid potassium chloride should you add?

$$C(KCl) = \frac{m(KCl)}{M(KCl)} \cdot V$$

$$m(KCl) = \frac{M(KCl) \cdot C(KCl)}{V}$$

$$M(KCl) = 74.5$$

$$m(KCl) = \frac{74.5 \cdot 0.245}{0.25} = 73.01g$$