

For dilute solutions we can assume that solution density is equal to that of water. As the density of water is 1 g/ml, solution mass is 250 g.

$$c_{\% w/w} = \frac{m(KCl)}{m(solution)} \cdot 100\%$$

then

$$m(KCl) = \frac{c_{\% w/w} \cdot m(solution)}{100\%} = \frac{4.00\% \cdot 250}{100\%} = 10 (g)$$

Answer: 10 g.