

## Answer on Question #56489 - Chemistry - General Chemistry

### Question:

Volume of water needed to prepare a 1.4% w/v KCl solution using 1.0 g KCl express answer using 2 significant figures.

### Solution:

We can calculate the mass of the 1.4% KCl solution:

$$m(KCl)_{sol.} = \frac{m(KCl)}{\omega\%(KCl)} \times 100\% = \frac{1.0g}{1.4\%} \times 100\% = 71.43g$$

The mass of the water:

$$m(H_2O)_{sol.} = 71.43g - 1g = 70.43g$$

**Answer: 70.43 g**