

If a chemical solution contains 8% of base, and there is 15ml of base, what is the volume of the solution?

A. 135.5 ml B. 187.5 ml C. 175.5 ml D. 220.5 ml

Show Answer... Correct Answer: B (187.5 ml)

Explanation:

To solve this problem, we can use the formula for percent by volume:

Percent by volume = (volume of solute / volume of solution) x 100%

Given that the solution contains 8% of the base and the volume of the base is 15 ml, we can find the volume of the solution by rearranging the formula:

Volume of solution = (volume of solute / percent by volume) x 100%

Plugging in the values, we get:

Volume of solution = $(15 \text{ ml} / 8\%) \times 100\%$

Calculating this, we find:

Volume of solution = 187.5 ml

Therefore, the correct answer is (B) 187.5 ml.