Question#75387 – Chemistry – General chemistry

Question: Calculate the mass percent of a sucrose solution that is made by mixing 5.36 grams of sucrose into water until the solution has a mass of 26.3 grams. Give your answer as a whole number.

Solution:

The general formula for mass percent:

$$\% \, ^m/_m = \frac{m(solute)}{m(solution)} \times 100\%$$

The solute is sucrose.

$$\% \, ^m/_m = \frac{m(sucrose)}{m(solution)} \times 100\% = \frac{5.36 \ g}{26.3 \ g} \times 100\% = 20.4\%$$

Answer has to be given as whole number: 20.4% → 20%.

Answer: 20% of sucrose.