2NaHCO3---> Na2CO3 + CO2 + H2O
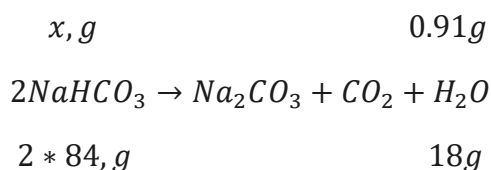
if .91g of water is produced how much sodium hydrogen carbonate decomposed

Answer:

As it is not clear how many grams of water was produced (0.91 g or 91 g), I will get the answer for both cases, but I will show calculations just for the first one.

According to the chemical equation and the law of mass conservation:

$$x, g \qquad\qquad\qquad\qquad 0.91g$$

$$2NaHCO_3 \rightarrow Na_2CO_3 + CO_2 + H_2O$$

$$2*84, g \qquad\qquad\qquad\qquad 18g$$

where x – is the mass of decomposed sodium bicarbonate(in grams), which is equal to:

$$x = \frac{0.91 * 2 * 84}{18} = 8.49 \ g$$

So, the right answer is 8.49 g (849.34 g, in case, if it was produced 91 g of water).

Answer provided by AssignmentExpert.com