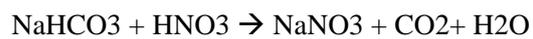


The reaction for this process is next:



The mole ratio of NaHCO<sub>3</sub> and CO<sub>2</sub> is 1: 1,so if amount is n = m/Mw, for NaHCO<sub>3</sub> it is:

$$n = m/Mw$$

$$n = 7.50 / 84 = 0,0893 \text{ mol}$$

If mole ratio of NaHCO<sub>3</sub> and CO<sub>2</sub> is 1: 1 ,the amount of CO<sub>2</sub> is the same, and mass of it is:

$$m = n * Mw = 0,0893 * 44 = 3.93 \text{ g. It is a theoretical mass. Real mass is 3.25 g.}$$

$$\% \text{ yield} = \text{real mass} / \text{theoretical mass} * 100\% = 3.25 / 3.93 * 100\% = 82,7 \%$$