

The chemical equation for this process is next:



As you can see, the molar ratio between calcium carbonate and calcium chloride is 1:1, it means that one mole of calcium chloride must react with one moles of hydrochloric acid.

Theoretical amount of CaCO_3 is $m/M_w = 50 / 100 = 0.5 \text{ mol}$

Real amount of CaCO_3 is equal to calcium chloride amount and it is : $10 / 111 = 0,090 \text{ mol}$

Yield of reaction is $0.09/0.5 * 100\% = 18,0 \%$