



Theoretical yield

$$= 0.159 \text{ g extra } \text{Na}_2\text{CO}_3 \text{ in filter flask}$$

$$\frac{2.25 \times 10^{-3} \text{ mol SrCl}_2}{1 \text{ mol SrCl}_2} \Bigg| \frac{2 \text{ mol NaCl}}{1 \text{ mol SrCl}_2} \Bigg| \frac{58.4 \text{ g NaCl}}{1 \text{ mol NaCl}} = \boxed{0.292 \text{ g NaCl}}$$

$$\frac{2.25 \times 10^{-3} \text{ mol SrCl}_2}{1 \text{ mol SrCl}_2} \Bigg| \frac{1 \text{ mol SrCO}_3}{1 \text{ mol SrCl}_2} \Bigg| \frac{147.6 \text{ g SrCO}_3}{1 \text{ mol SrCO}_3} = \boxed{0.369 \text{ g SrCO}_3}$$

Actual yield

$\text{NaCl} = 0.457 \text{ g} \rightarrow 157\% \text{ yield b/c } \text{SrCO}_3 \text{ & excess reagent contaminated it}$

$$0.04797 \text{ g SrCO}_3 + 0.159 \text{ g Na}_2\text{CO}_3 + 0.292 \text{ g NaCl} = \boxed{0.499 \text{ g actual of everything}}$$

$\text{SrCO}_3 = 0.321 \text{ g} \rightarrow 87\% \text{ yield b/c lost some to under filter paper}$