

EXPERIMENT # 14

NAME: _____

TABLE SALT FROM SODA ASH
REPORT FORM

DATA:

Mass of beaker _____ g
Mass of beaker and sample (Na₂CO₃) _____ g
Mass of sample (Na₂CO₃) _____ g

Mass of beaker and residue (NaCl) _____ g
Mass of residue (NaCl) _____ g

Volume of conc. HCl added _____ mL

CALCULATIONS:

Molar mass of Na₂CO₃ _____ g/mol
Number of moles of Na₂CO₃ added _____ mol
Show calculations below:

Concentration of HCl (aq) _____ M
Number of moles of HCl added _____ mol
Show calculations below:

Write a balanced chemical equation for this chemical reaction. Include state designations for all reactants and products.

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Assuming Na_2CO_3 is the limiting reactant, how many grams of NaCl can be produced from the amount of Na_2CO_3 used in this experiment?

_____ g

Show calculations below:

Assuming HCl is the limiting reactant, how many gram of NaCl can be produced from the amount of HCl used in this experiment?

_____ g

Show calculations below:

Which reactant is limiting? _____

Which reactant is excess? _____

Actual yield of NaCl _____

g

Theoretical yield of NaCl _____

g

Percent yield of NaCl _____

%

Show calculations below:

Why must the first heating be done under the fume hood rather than at your bench?
