

Stoichiometry

Mass of Magnesium

Purpose:

Calculate the mass of magnesium, using stoichiometry, that reacts with hydrogen chloride.

Write the balanced equation for the reaction between magnesium and hydrogen chloride.

Procedure:

1. Obtain a piece of magnesium
2. Fill a eudiometer with water and practice inverting it in a beaker of water without forming an air bubble. Repeat if an air bubble forms
3. Bring your eudiometer to teacher to obtain hydrogen chloride.
4. Fill the eudiometer containing hydrogen chloride to the top with water
5. Invert the eudiometer without allowing an air bubble to form.
6. Place the magnesium in the beaker and cover with the mouth of the eudiometer
7. Allow the reaction to take place and measure the volume of hydrogen gas collected in the eudiometer
8. Clean up the eudiometer

Data:

Volume of hydrogen gas _____ ml

Calculations:

1. Convert ml of hydrogen gas to liters
2. Use stoichiometry to calculate the mass of magnesium used