

How to write a method...just think of CIDER!

Control variables

Independent variable

Dependent variable

Equipment

Repeats



Chemistry Practical 2 | Neutralisation Foundation

Determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration.

Method

1. Use the pipette and pipette filler to put exactly 25 cm^3 sodium hydroxide solution into the conical flask.
2. Put the flask on a white tile.
3. Clamp the burette vertically in the clamp stand. There should be just enough room underneath for the conical flask and tile.
4. Close the burette tap.
5. Use the small funnel to carefully fill the burette with dilute sulfuric acid. Before it completely fills put a small beaker underneath the tap, gently open it to allow acid to fill the tap, before closing again and filling the burette to the 0.00 cm^3 line. Remove the funnel.
6. Put 5–10 drops of phenolphthalein indicator into the conical flask. Swirl the flask to mix and put under the burette on top of the tile. The contents of the flask will go pink.
7. Carefully open the burette tap so that 10 cm^3 sulfuric acid slowly flows into the flask. Constantly swirl the flask when adding the acid. Then add the acid drop by drop until you see a permanent colour change from **pink to colourless** in the flask. You need to be able to shut the tap immediately after a single drop of acid causes the colour to become permanently colourless.
8. Read the burette scale carefully and record the volume of acid you added to 2dp.
9. Repeat steps 1–8 twice more and record the results in the table.

Can you find the **cider**?

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1. Use the **pipette and pipette filler** to put exactly 25 cm^3 **sodium hydroxide** solution into the **conical flask**.
2. Put the flask on a **white tile**.
3. Clamp the **burette** vertically in the **clamp stand**. There should be just enough room underneath for the conical flask and tile.
4. Close the burette tap.
5. Use the **small funnel** to carefully fill the burette with **dilute sulfuric acid**. Before it completely fills put a **small beaker** underneath the tap, gently open it to allow acid to fill the tap, before closing again and filling the burette to the 0.00 cm^3 line. Remove the funnel.
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Determination of the

- reacting volumes of solutions of a strong acid and a strong alkali by titration
- concentration of one of the solutions in mol/dm³ and g/dm³ from the reacting volumes and the known concentrations of other solutions

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