Make Halloween Memorable This Year With A Fun Activity For Your Chemistry Lesson



Get ready for an enchanting October as your students will step into the shoes of wizards and witches, mastering the art of changing flame colours. With just a few lab supplies, the last Chemistry class before half term will be one they won't forget!

Getting Started:

Aim of Experiment: In this fun Halloween experiment, we demonstrate how a chemical reaction not only alters chemical properties, but also induces changes in physical attributes. The primary aim of this chemistry demonstration is to illustrate the properties of esters, utilising the dynamic combination of boric acid and alcohol.

Equipment Required:

- Matches
- Glass Rod
- Crucibles
- Boric acid (5 g)
- Ethyl alcohol (50 ml)
- Concentrated sulphuric – **Care needed**



General Safety Rules:

- Every individual involved in this experiment must wear personal protective equipment, including gloves, lab coat, and eye protection.
- Ensure the experiment is carried out in a well-ventilated room.
- Adhere to fire safety rules.
- Avoid any chemical contact with eyes or mouth.
- Not suitable for children. Teacher/Technician demonstration only.
- Clean all equipment thoroughly after use.
- Use the CLEAPSS Hazcards to prepare a risk assessment.

Halloween Activity

Advice For Lab Technicians:

- Only conduct experiments as outlined in the provided instructions to avoid potential injuries and health risks from incorrect chemical use.
- Before starting the experiment, the teacher/lab technician should clearly outline the safety guidelines to the students, with special emphasis on the proper handling of chemicals and flammable liquids.
- Ensure the area around the chemistry demonstration is free of any obstacles, well-lit and ventilated, and close to a water supply. Additionally, provide heatproof mats for crucibles and a safety screen.

Step by Step Instructions:

1. Begin by pouring ethyl alcohol into two crucibles and ignite them.
2. Observe that the burning alcohol produces a yellow flame.
3. Safely put out the fire using a small heatproof mat
4. In one crucible, add 5g of boric acid and a few drops of concentrated sulphuric acid.
5. Thoroughly mix the contents and allow it to sit for 20 seconds.
6. Ignite the contents of the crucibles once more.
7. Take note that one crucible continues to emit a yellow flame, while the other now displays a vibrant green flame.

Next Steps:

If you found this fun Halloween experiment enjoyable, we invite you to subscribe to our mailing list for a continuous supply of engaging science activities tailored for your classroom. Should you need any additional information about this experiment, feel free to reach out. Our team is happy to assist, whether it's in selecting budget-friendly equipment or ensuring the utmost safety standards.

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