

## Preparation of potassium dihydrogenphosphate

### Teacher and technician sheet

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#### Equipment and materials

Each student or pair of students will require:

- Evaporating basin
- Tripod and gauze
- Bunsen burner
- 10 cm<sup>3</sup> pipette
- Burette and stand
- 100 cm<sup>3</sup> conical flask
- Filter funnel and filter paper and conical flask (to stand funnel on)
- Glass rod
- 1 mol dm<sup>-3</sup> phosphoric acid
- 1 mol dm<sup>-3</sup> potassium hydroxide solution
- Methyl orange indicator solution
- Dessicator

Make sure that students wear eye goggles ((BS EN166 3 safety specification). 1 mol dm<sup>-3</sup> potassium hydroxide is corrosive. 1 mol dm<sup>-3</sup> phosphoric acid is an irritant to the eyes, lungs and the respiratory system.

Potassium dihydrogenphosphate is highly deliquescent. Make sure students do not leave samples in the open. Samples should be dried in a dessicator and labelled sample bottles containing the salt should also be stored in a dessicator.

#### Further suggestions

Students could test the effectiveness of potassium dihydrogenphosphate as a fertiliser.