

## Preparation of zinc sulfate

### Teacher and technician sheet

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#### Equipment and materials

Each student or pair of students will require:

- Weighing bottle (or small beaker)
- 250 cm<sup>3</sup> beaker
- Bunsen burner, tripod and gauze
- 25 cm<sup>3</sup> measuring cylinder
- Hot water bath
- Filter funnel and filter paper
- Thermometer (0 – 110 °C)
- Evaporating basin
- Spatula
- Sample bottle
- 1 mol dm<sup>-3</sup> sulfuric acid
- Zinc carbonate

The hot water can be simply a beaker of water kept at about 60 °C. The evaporating basin needs to be larger enough to sit comfortably on the top of the beaker.

Make sure that students wear eye protection. 1 mol dm<sup>-3</sup> sulfuric acid is an irritant.

#### Further suggestions

Students could

- test the effectiveness of their product as a fertiliser;
- find out about other zinc compounds that are used in fertilisers;
- find out about other uses of zinc sulfate.