Preparation of zinc sulfate
Teacher and technician sheet

Equipment and materials
Each student or pair of students will require:
• Weighing bottle (or small beaker)
• 250 cm³ beaker
• Bunsen burner, tripod and gauze
• 25 cm³ measuring cylinder
• Hot water bath
• Filter funnel and filter paper
• Thermometer (0 – 110 °C)
• Evaporating basin
• Spatula
• Sample bottle
• 1 mol dm⁻³ 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⁻³ 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.