Dissolution of blackcurrant lozenges

Teacher and technician sheet

Health and safety note

Make sure that students wear eye protection. Although not needed, students might wear chemical-resistant gloves to get used to handling equipment and materials while wearing the gloves.

WHO International pharmacopeia

The International Pharmacopoeia (Ph.Int.) includes recommended procedures for analysing pharmaceutical substances and determining their properties. It is intended to serve as source material for reference or adaptation by any World Health Organization (WHO) Member State wishing to establish pharmaceutical requirements.

The instructions for using the 'paddle' method to investigate the rate of solubility of a medicinal drug were adapted from: http://apps.who.int/phint/en/. The original can be found in the folder *Methods of analysis* and then the folder *Pharmaceutical technical procedures* within it.

Equipment and materials

Each student or pair of students will require:

- Colorimeter and suitable filter
- 1 dm^3 beaker
- 1 dm^3 measuring cylinder
- Paddle stirrer
- 50 cm^3 burette (x 2)
- Blackcurrant lozenges
- Boiling tubes (x 10) and rack
- Stopwatch
- Dropper pipette
- Electric hotplate

Note: A magnetic stirrer could be used, but this tends to set up a vortex that does not bring about good mixing and dissolution.