

Activity Pack

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(Group for Organic
Surfactants and Intermediate
Products)

CLEAN SCIENCE

Keyword: Surfactants
Age range: 11-14
Ability: Mixed
Lesson Time: 60 minute activities
Attainment Target: AT1 Scientific Investigation
Cost: £7.50
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Teaching from: Oaklands Community School, Hampshire

This pack is introduced to the pupils with an investigation of the stain removal power of washing agents. This is followed by separate investigations into the foaming, wetting, emulsifying and dispersing properties of the same washing agents and how each of these contributes to the stain removal process.

The pack can be used as a whole scheme for a topic, or activities can be selected as and when they are appropriate. If structured, an activity can be completed in 60 minutes, if open-ended two 60 minute sessions will be needed.

The pack consists of specific teacher notes, resource lists, general information and photocopiable activity sheets which are clearly presented with cartoon pictures, instructions and extension questions. It offers excellent opportunities to develop investigatory and practical skills with an interesting and relevant context, for example one such activity is entitled: "Which washing agent produces the most foam?"

No expensive equipment is needed and students will be familiar with the chemicals involved such as washing-up liquid, bubble bath, soap etc. The emphasis is definitely on having fun in science.

TOPIC BOX

- which washing agent works best at low temperatures?
- which washing agent produces the most foam?
- does a washing agent need foam?
- how to make wool sink
- making and using a surface tensiometer
- emulsifying oil and water
- dispersing talc in water