

5: Foam Fire Extinguisher

This is a fun method for producing a foam fire extinguisher. It can be messy!



eye protection
must be worn



slippery floors


What you will need

2 x 50 cm³ beakers
50 cm³ measuring cylinder
100 cm³ conical flask
bung with delivery tube drawn out into a fine nozzle
spatulas
stirring rods
dropping pipette
aluminium sulphate powder
sodium hydrogencarbonate
washing up liquid or liquid detergent

eye protection
protective clothing (e.g. lab coats)

What you do



- Put 2 spatula measures of aluminium sulphate into a beaker containing 30 cm³ of water. Stir vigorously.
- Now add 2 spatula measures of sodium hydrogencarbonate to the other beaker and add 30 cm³ of water to this. Stir vigorously.
- Pour the aluminium sulphate solution into the conical flask and add a few drops of washing up liquid. This is the foaming agent.
-  Carefully add the contents of the other beaker to the conical flask. Put the bung and delivery tube on quickly and stand back! Make sure you direct the jet into a sink.
- Try again and then record any changes you make.

