

## 23: Slime with a Twist

When certain solids are mixed with a liquid, a gel is formed. The solid makes a network which traps the liquid so it cannot flow freely. The result is a semi-solid which can move around, but not as freely as a liquid. You are going to make an eerie gel which glows under UV light - slime with a twist.



eye protection  
must be worn



UV light source



IRRITANT  
borax dust

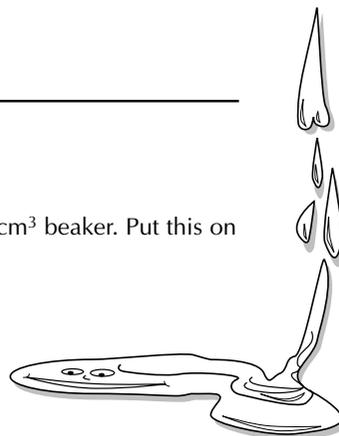
### What you will need

weighing balance	polyvinyl alcohol, PVA
250 cm <sup>3</sup> beaker	sodium tetraborate solution
100 cm <sup>3</sup> measuring cylinder	dye solution provided by your teacher
disposable pipettes	PVA glue
hot plate	borax powder
stirring rod	
source of ultra violet light (used under teacher's supervision only)	eye protection

### What you do

#### SLIME WITH A TWIST

-  Measure 100 cm<sup>3</sup> of the dye solution into a 250 cm<sup>3</sup> beaker. Put this on the hot plate and warm it gently.
- Add 40 g of PVA to the solution slowly, stirring continuously. Do not let the mixture boil.
- When the PVA has dissolved remove the solution from the hot plate.
- Add 100 cm<sup>3</sup> of the sodium tetraborate solution a few drops at a time using a disposable pipette, until the desired consistency has been reached. The slime will be runnier when warm.
-  Ask your teacher to shine a UV light on to your sample. It will look more impressive in a darkened room.
- You can store your slime for a limited period in a labelled, sealed bag in a fridge.



### What you do

#### FARTY PUTTY

- Measure 50 cm<sup>3</sup> PVA glue into a small plastic beaker. Add 50 cm<sup>3</sup> of water and stir.
- You might like to add a few drops of food colouring.
- Add 15 cm<sup>3</sup> borax solution and stir until the putty forms and feels dry to the touch.
- Cover the beaker lightly with your hand, turn upside down to introduce air in to the bottom of the beaker. Then turn upright and push fingers down into the putty.