

Zedua Experiments

Title: Alcohol lamp from an ink bottle

What is Alcohol Lamp?

An alcohol burner or spirit lamp is a piece of laboratory equipment used to produce an open flame. It can be made from brass, glass, stainless steel or aluminium.

Materials Required:

1. Ink bottle
2. Nail
3. Piece of metal
4. Small rod or dowel rod
5. Cotton wick
6. Wood alcohol

Procedure:

1. Close an ink bottle with a metal top which screws on.
2. Use a nail to punch a hole in the centre of the metal top.
3. Increase the size of the hole until it is about 8 to 10 mm in diameter.
4. Smoothen the opening by using some hard, round device.
5. Cut a piece of metal about 2.5 cm wide and 4 cm long from a soft metal can (soft drinks can) or piece of sheet metal.
6. Roll this into a tube on a piece of dowel rod or a round wood stick of suitable diameter to fit the opening on the cap of the ink bottle.
7. Insert this tube in the top and let it go about 1 cm into the bottle.

Note: The tube may be soldered around the joint with the top and along the seam.

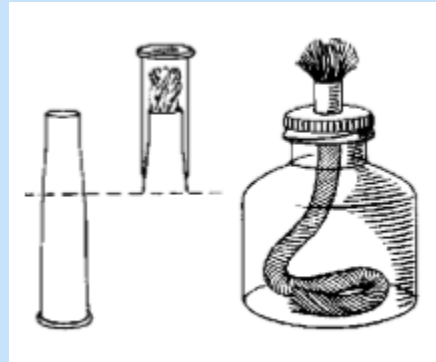
8. Insert a wick into the ink bottle.

Note: A wick may be made from cotton waste, a bit of cotton bath towel or from a bundle of strands of cotton string. Be sure to have enough wick to extend to the bottom of the bottle and cover it.

9. Fill the bottle with denatured or wood alcohol.

Note: In hot countries a cap should be made to cover the wick when the lamp is not in use. An old fountain pen cap may serve the purpose.

If a brass rifle cartridge is available it can be used to make both the tube and the cap by cutting it.



Source: learning kids

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