

How do you activate it?

Remember to P.A.S.S.

1. **Push** nail down to pierce bag.
Repeat this a few times to ensure all sodium bicarbonate has left the bag.
2. **Aim** foam jet at fire.
3. **Shake** and then **squeeze** the bottle.
4. **Sweep** the extinguisher at the base of the fire.
5. Recommended: **Turn bottle upside down** for easier aim, once some of the foam has been discharged.



Safety First!

Safety while making extinguisher

- Do not ingest vinegar. Thoroughly rinse hands after contact with vinegar.
- Be careful with drilling and hammering.

Safety while using extinguisher

- Aim away from yourself, towards the fire.
- Be careful when activating nail. Knock the nail down quickly with the palm of your hand to avoid injury.
- Attack the thermal gaseous layer and not the flames.
- Corrugated iron is a very good conductor of heat. Wet surrounding houses to prevent spreading of the fire.

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INSTRUCTION MANUAL

How to make a DIY foam fire extinguisher



By Desania Govender & Yandisa Sojola

What do you need?

Steps 1-8 outline the procedure for building a DIY foam fire extinguisher, suitable for extinguishing incipient stage class A and class B fire using the following materials:

- 750 ml vinegar
- 750 ml water
- 105 g sodium bicarbonate
- 7.5 g (1.5 tsp) dishwashing liquid
- 2 L cool drink bottle
- 1 plastic fruit bag
- 100 mm x 4 mm nail
- 1 cork
- 1 spring from a BIC pen
- Paper clips
- Masking tape

Did you know?

Class A fire



Ordinary combustibles such as wood and cardboard.

Class B fire



Flammable liquids such as petrol and paraffin.

Step by step



1. Drill 7 mm hole into bottle.



2. Cover the hole with masking tape.



3. Add 750 ml vinegar to the bottle.



4. Mix 7.5 g dishwashing liquid with 750 ml water. Add to bottle.



5. Add plastic bag into opening of bottle. Add 105 g sodium bicarbonate.

Tip: Use a rubber band to keep bag in place.



6. Cut paper clips into smaller pieces using wire cutters.



7. Drill 4 mm hole into bottle cap. Place spring onto nail and onto the bottle cap. Hammer cork onto the end of the nail.



8. Fasten cork into the opening of the bottle. Close bottle cap. Remove excess plastic.

Tip: Pull the plastic bag before closing to prevent bag from sagging.