



WARNING!
The jug will get very hot, so ask an adult to help.

Make your own SOAP

Craft a thoughtful present this festive season.

What you need

- Silicone or plastic moulds, such as ice-cube trays
- Cooking spray
- Pure glycerine soap base (available online or from craft shops)
- Microwave-safe measuring jug
- Paprika or turmeric spices (optional)
- Soap dyes (optional)
- Essential oils such as lavender (optional)

How does it work?

Your homemade soap uses the same simple science as any supermarket bar of soap. The basic principle behind its superpower cleaning ability hasn't changed in the 5,000 years or more since soap was invented. Water on its own doesn't really remove germs and dirt because water and oily substances (such as the surfaces of germs and oils produced by your skin) don't mix, so the water won't wash them

all off. Pour some cooking oil into a glass of water, and you will see that the oil sticks together in blobs rather than mixing in with the water. One end of a soap molecule (the basic chemical building blocks of a substance) is attracted to water, and the other end is attracted to oily substances. Oily materials become surrounded by soap molecules, which then allows them to mix with water and be washed away.



1 Spray the moulds with cooking spray to cover them with a thin layer of oil. Place a small amount of the soap base in the jug and microwave on high for 30 seconds.



2 Stir well, being careful not to burn yourself on the hot liquid. If any lumps remain, microwave for further 10-second bursts until they have all fully melted.



3 You can now colour your soap mix. Use paprika or turmeric for a natural orange or yellow, or add a few drops of soap dye, and mix well. Add essential oils for scent if you like.



4 Pour the liquid into the moulds and allow to cool for at least two hours before removing. The soap bars are now ready for you to use, or to wrap up as presents for Christmas.