



GROWING THE FUTURE
TYFU'R DYFODOL

HONEY AND CLAY SOAP

Making your own soap at home can be a therapeutic activity to enjoy. Take your time and enjoy the process!

Warning: This soap is for home use only and not for sale. The recipe has to be certified and registered under cosmetics regulations to be allowed to be sold.

EQUIPMENT REQUIRED:

- Microwave
- Stick blender
- Pyrex mixing jug, jug for water and small beaker (lye)
- Weighing scales
- Pyrex bowl
- 3 large beakers/containers for measuring the oils
- 4 small containers for other smaller quantities
- 1 teaspoon, 1 tablespoon
- Spatula
- Tea towel and/or kitchen roll
- Soap mould (alternatively a Tupperware or sandwich box can be used), soap cutter or sharp knife
- To wrap: Brown paper, twine, labels and other items to decorate.

HEALTH AND SAFETY:

The lye solution (once added to the soap) and the soap is caustic, so care must be taken to avoid splashes when handling the lye and pouring the soap into the mould.

INGREDIENTS:

- 130 grams Sodium Hydroxide
- 10 grams Beeswax
- 20 grams Cocoa Butter
- 10ml Honey
- 5.5 grams White Clay
- 230 grams Water
- 175 grams Sunflower Oil
- 200 grams Olive Oil
- 525 grams Coconut Oil

Note: Weigh ingredients accurately for the best outcome. Ensure you tare the scales to zero each time.



METHOD

LYE SOLUTION

Care must be taken when mixing the lye as it gives off fumes that should not be inhaled. It is recommended that if possible mix outside, use a face covering and mix at arm's length to avoid breathing in the fumes. Once blended these fumes will dissipate.

- Always add NaOH (sodium hydroxide) to water, to avoid bubbling up and potential to spill or splash. Set aside to cool.
- Preferably make up the lye solution the day before use, to allow it to cool completely.
- Decant your lye solution into a glass or plastic bottle with a secure lid, clearly labelled Hazardous and keep out of reach of children!

To make:

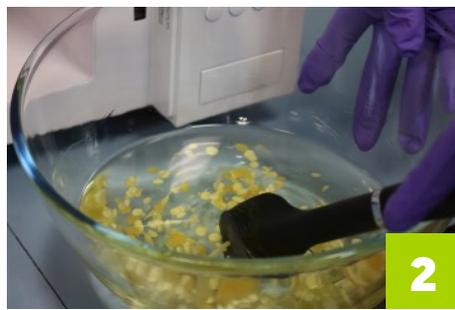
- Weigh out the water into your Pyrex jug
- Weigh the sodium hydroxide into a separate beaker.
- Carefully pour the sodium hydroxide into the water stirring until the liquid clears.
- Decant into a bottle and leave to cool.
- Clearly label as it is a caustic solution and keep out of the reach of children, for use later.

Caution: The jug and contents will become hot!



MAKING THE SOAP:

- Weigh the coconut oil, cocoa butter and beeswax into a large Pyrex bowl.
- Set the timer on the microwave to 3 and a half minutes.
- Heat to melt the solid oils, but interrupt to stir half way to ensure the oils are heating evenly.
- After the set time remove from the microwave and if some of the beeswax has not all melted, continue to stir until all the beeswax has melted using the heat from the oils. This will avoid overheating the mixture.
- Add the olive and sunflower oils to the bowl and stir.
- Also mix in the clay, but leave the honey to one side.
- Carefully add the lye solution and mix with the spatula finally adding in the honey.
- Use the hand blender until the mixture resembles a custard like consistency taking care to avoid splashes. This should only take a few minutes.
- Pour into mould, scraping the bowl out with the spatula to get as much soap as possible from the bowl. Tap the mould to release any air bubbles.
- Cover with bubble wrap or recycled polythene and wrap with towels/tea towels. This will help speed up the saponification.
- Leave covered until the soap has gelled (approximately 2 hours but can be left overnight).
- Unwrap, cool and cut.



CUTTING THE SOAP

Once the soap block has cooled, it can be removed from the mould and cut into separate bars using a knife or soap cutter and individually wrapped. If the soap block doesn't release from the mould straight away, put it in the freezer for around 10 minutes as this will help the soap come away from the plastic.



CLEANING UP

A tea towel can be used to wipe out the bowls and utensils prior to washing up or putting in the dishwasher. Leave the tea towel for 24 hours for the soap to saponify before putting in the washing machine, to avoid blocking your pipework or drains.

Note: Utensils used for soap making should be kept separate from general cookware as these may become tainted and could spoil any subsequent foods prepared in them.



RECOMMENDED SUPPLIERS:

The National Botanic Garden's Shop for honey and beeswax blocks
[Naissance](#)
[The Soap Kitchen](#)

GROWING THE FUTURE

The Growing the Future project at the National Botanic Garden of Wales is a five-year project to champion Welsh horticulture, plants for pollinators, the protection of wildlife and the virtues of growing plants for food, fun, health and well-being.

Whether you are a seasoned gardener, a fledgling grower or a budding beekeeper – we want to help provide training, information and support to you. For more information on the project's events and courses, please call **01558 667150**, email gtf@gardenofwales.org.uk or visit botanicgarden.wales/science/growing-the-future.

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