

hot process soap making

Soap made using the ‘hot process’ method has its own characteristics and the added advantage of being able to use the finished soap immediately after cooking.

It is a simple method that requires the soap base to be cooked at high temperatures (92°C [200°F]). Furthermore, using the hot process method prevents most problems that arise from the cold process method. The procedures and illustrations in this section offer a simple, concise way of making bar, liquid and cream soaps using the basic paste method as shown earlier in the cold-process method.

The hot process bar soap is covered first followed by liquid and cream soaps. I have also provided bar, liquid and cream soap recipes for you to try using this method.

It is best to follow the instructions carefully for the first few times, then, as you become familiar and confident with the process you may alter the order of the steps as you feel necessary. There is no one way of doing this so do what is comfortable for you.

safety

Safety is paramount when making soap due to the use of sodium and potassium hydroxides. It is best to set aside a specific time (two-and-a-half-hours) where you can work with full attention. There is no place for small children and inquisitive pets so make arrangements for them prior to making soap.

Always wear safety goggles – the kind you can get from any DIY store are suitable – gloves, and an apron. Wear clothes that you don’t mind getting dirty or acquiring a few burn marks. Have a bottle of vinegar close at hand to neutralise any caustic solution on the skin and on work surfaces.

Always work in an organised manner and apply some common sense.

hot process bar soap instructions

step 1 preparations

- protect your work area with newspaper
- prepare your mould. Grease the mould with a little oil or fat and line with greaseproof or baking parchment paper for easy release of the soap from the mould.
- dress appropriately with safety goggles gloves and apron



fig 28: grease all sides of the mould

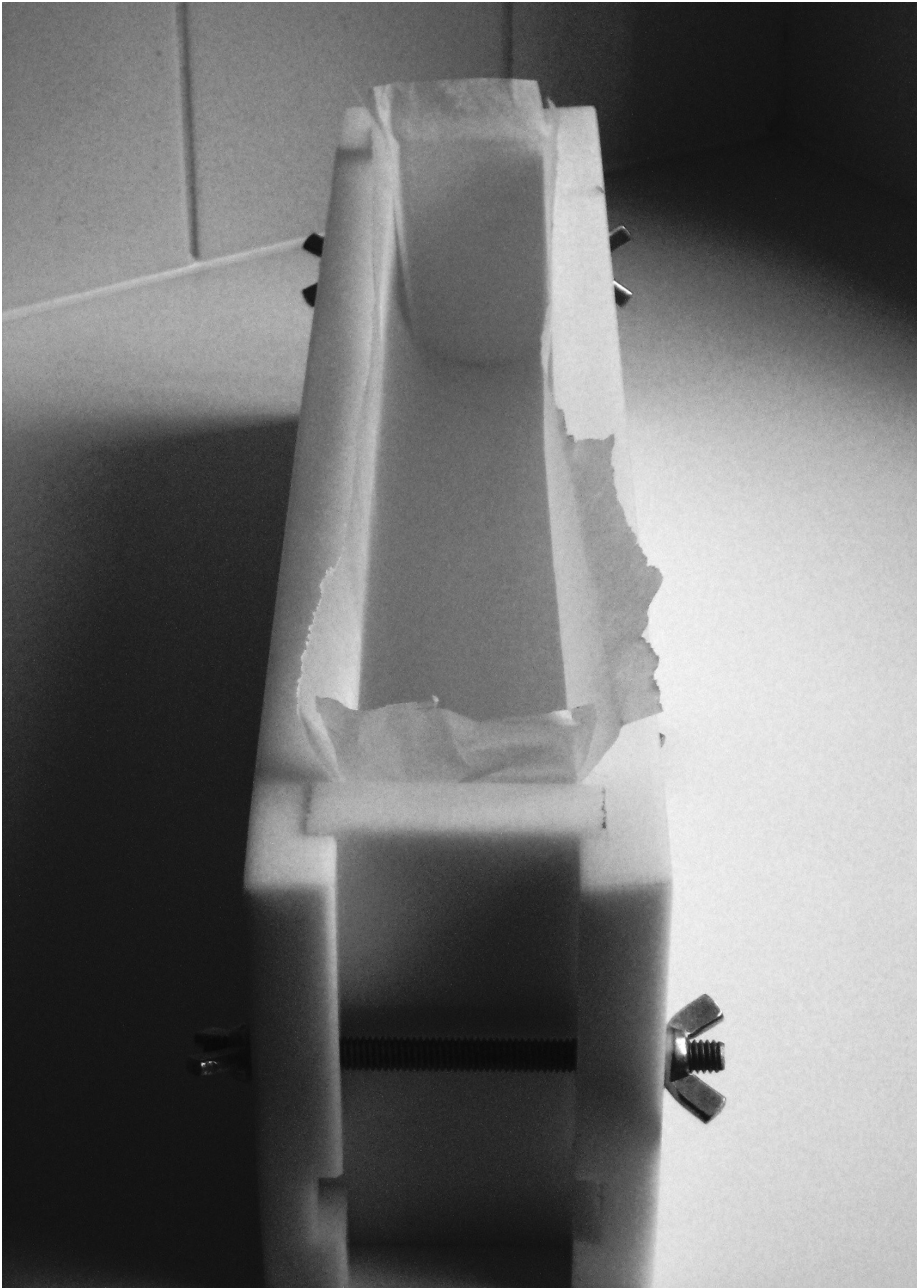


fig 29: line the mould

step 2 prepare the caustic solution

- weigh the caustic soda accurately in a glass measuring jug
- weigh the water into a separate glass measuring jug
- add the caustic soda to the water (do not inhale the fumes) and stir slowly with the spatula to dissolve it. Set the mixture aside to cool to 35-38°C (98-100°F).

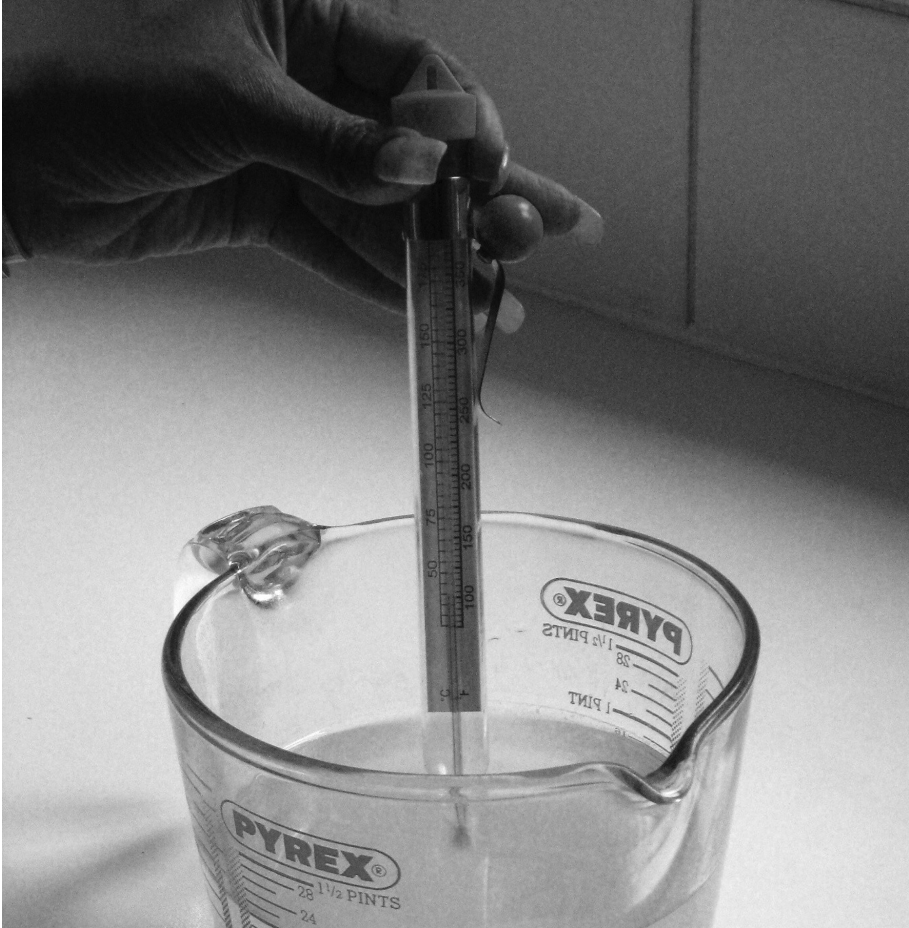


fig 30: combine the caustic soda and water

- weigh out the oils and fats then add them to the slow cooker set on medium heat. Melt and heat them to the required temperature which is 35-38°C (98-100°F).



fig 31: melt the fats and oils in the slow cooker

step 3 combine the ingredients

- with your rubber gloves and goggles on, slowly add the caustic soda solution to the oils in the slow cooker. Use the hand blender to mix to a thick 'trace', that is, so that the mixture thickens to a pudding-mix consistency.



fig 32: add the caustic solution to the heated fats and oils

- stir the mixture carefully with a spatula to ensure the caustic solution is evenly distributed



fig 33: stir the mixture



fig 34: mixture at thick trace

step 4 adding colour

- add colourants and additives and mix thoroughly to ensure they are evenly distributed throughout the soap mixture

step 5 cook the mixture

- cook on medium heat for an hour until the mixture becomes translucent and resembles petroleum jelly



fig 35: the mixture slowly changes during cooking



fig 36: the mixture after an hour's cooking

- check it intermittently to ensure it is behaving itself and stir the mixture to release any build up of air and so prevent it boiling over

step 6 adding fragrance

- add scents, blended scents or botanicals and mix them in thoroughly, then scrape the soap mixture into the prepared mould

step 7 allow the soap to harden

- leave the soap to cool and set for 8 hours

step 8 remove the soap from the mould

step 9 cut the soap into bars



fig 37: soap cutter

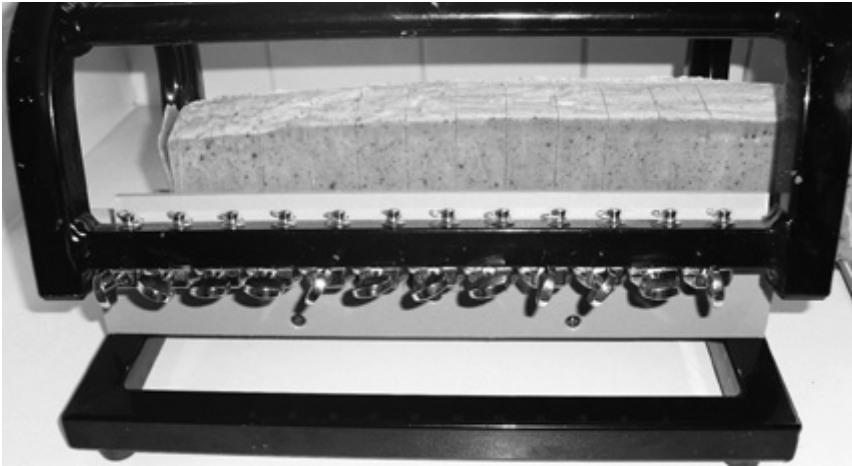


fig 38: soap block in the soap cutter

- leave the bars to harden for 4 weeks in a warm, ventilated area before using. The soaps are ready to use as soon as they harden but it is best to leave them a bit longer as they tend to dissolve quickly in water if they are not very hard.



fig 39: finished soap bars

hot process bar soap recipes

woods of the forest

This has a fresh and cheerful aroma – reminiscent of an early morning walk through the forest.

oil blend

136g cocoa butter

408g coconut oil

816g olive oil

caustic solution

185g caustic soda

453g water

additives

(Add at or after trace)

2 tablespoons olive powder

1 tablespoon juniper berry powder

1 tablespoon vanilla pod powder

colour

From additives

fragrance

10g cedarwood essential oil

10g juniper berry essential oil

5g vetiver essential oil

10g rose geranium essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

woodland wonder

A beautifully mild and textured soap with a lovely sweet, woody fragrance.

oil blend

68g castor oil
408g coconut oil
612g olive oil
272g palm oil

caustic solution

186g caustic soda
453g water

additives

(Add at or after trace)
2 tablespoons ground coffee
¼ cup (60ml) ground parsley leaves

colour

From additives

fragrance

5g sandalwood essential oil
5g cedar wood essential oil
10g benzoin essential oil
10g lavender essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

lime quencher

A zesty and spicy citrus soap with avocado oil; perfect for all skin types.

oil blend

408g coconut oil
680g olive oil
272g palm oil

caustic solution

200g caustic soda
453g water

additives

(Add at or after trace)

- 2 tbsp freshly grated lime rind
- 1 tbsp freshly grated grapefruit rind
- 1 tbsp dried lime leaf powder
- 1tbsp ginger powder
- 30g avocado oil

colour

From additives

fragrance

- 10g lime essential oil
- 10g grapefruit essential oil
- 5g ginger essential oil
- 5g *Litsea cubea* essential oil
- 5g patchouli essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

spirit of Christmas

This extra mild soap captures the fragrance of the festive season.

oil blend

- 408g coconut oil
- 680g olive oil
- 272g palm oil

caustic solution

- 196g caustic soda
- 453g water

additives

(Add at or after trace)

- 2 tablespoons frankincense powder
- 1 tablespoon myrrh powder
- 1 tablespoon cinnamon powder

colour

From additives

fragrance

5g cinnamon leaf essential oil
10g juniper berry essential oil
5g clove bud essential oil
10g frankincense essential oil
10g sweet orange essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

caribbean bouquet

This is reminiscent of the lovely mix of fragrances in the Caribbean garden wafting around the veranda in the cool evening breeze.

oil blend

408g coconut oil
680g olive oil
272g palm oil

caustic solution

200g caustic soda
453g water

additives

(Add at or after trace)
30g shea butter, melted
20g powdered ylang ylang flower petals

colour

None

fragrance

5g jasmine essential oil
10g orange essential oil
5g patchouli essential oil
10g sandalwood essential oil
10g ylang ylang essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

jungle flame

This soap captures the essence of the beautiful red jungle flame flower that brightens and perfumes the undergrowth of the rainforest.

oil blend

408g coconut oil

680g olive oil

272g palm oil

caustic solution

200g caustic soda

453g water

additives

(Add at or after trace)

2 tablespoons bayberry bark powder

1 tablespoon vanilla pod powder

colour

From additives

fragrance

10g sandalwood essential oil

5g black pepper essential oil

10g rose geranium essential oil

10g ylang ylang essential oil

temperature

35-38°C (98-100°F).

Please follow the instructions given on pages 84 to 91.

troubleshooting

The beauty of the hot process bar soap method is that any problems that occur can be corrected during the cooking process so there shouldn't be any trouble with finished soaps. However you may encounter the following as the soap is cooking:

curdling

This results from combining the oils and caustic soda solution at widely different temperatures. If this occurs then mix the soap emulsion thoroughly with the hand blender and cook the mixture until the problem is solved.

separation

It is important to stir the soap mixture with the hand blender until the mixture thickens before cooking.

dry and crumbly during cooking

This is caused by the evaporation of water from the soap mixture and isn't really a problem as it can be corrected by the addition of a small amount of water to produce a softer paste.