cold process soap making

The 'cold process' method of making soap is very easy. This method produces beautiful smooth-textured soaps but the snag is that it offers only one opportunity to get it right.

It is best to follow the instructions carefully for the first few times, then, once you become familiar and confident with the process, you may alter the order of the steps as you feel necessary to bring the caustic soda solution and oils to the same temperature. There is no 'correct' way of doing this so do what works 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.

cold process 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 all sides with greaseproof or baking parchment paper for easy release of the soap from the mould
- dress appropriately with safety goggles, gloves and apron



fig 9: grease all sides of the mould

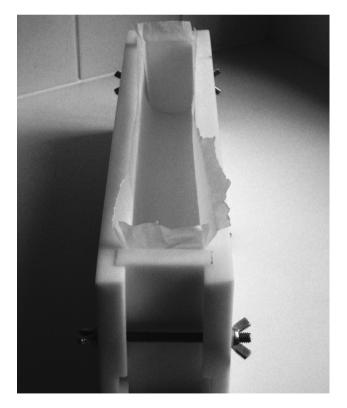


fig 10: line the mould

step 2 prepare the caustic solution and oils

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

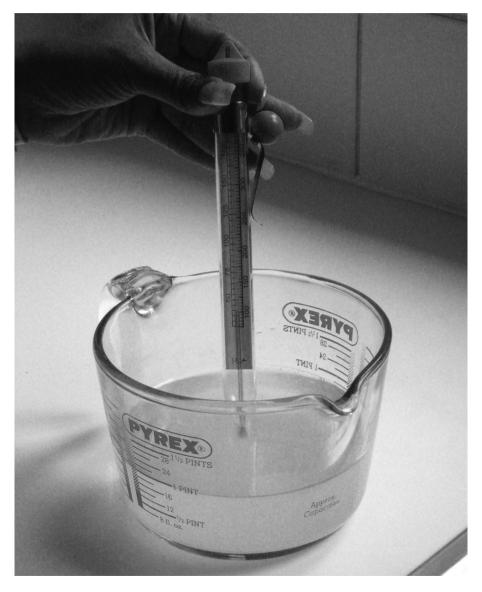


fig 11: combine the caustic soda and water

 weigh the oils and fat then add them to the soap pot. Melt them and heat to the required temperature: 35-38°C (98-100°F).



fig 12: add the fats and oils to the soap pot and allow to melt

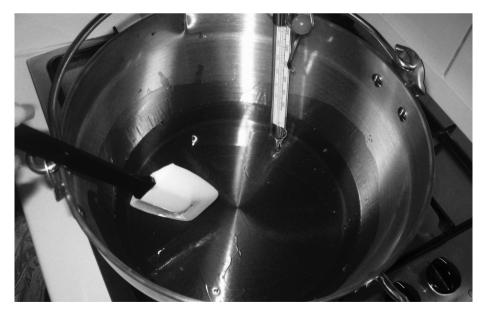


fig 13: heat the melted fats and oils to the required temperature

step 3 combine the ingredients

 with your rubber gloves and goggles on, slowly add the caustic soda solution to the oils in the soap pot



fig 14: add the caustic solution to the heated oil



fig 15: stir the mixture

- stir the mixture carefully with a spatula to ensure the caustic solution is evenly distributed
- use the hand blender to mix to a thin 'trace' so that the mixture thickens slightly



fig 16: bring the mixture to trace
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fig 17: mixture at light trace

step 4 adding colour

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



fig 18: incorporating an additive at light trace



fig 19: mixture at medium trace



fig 20: mixture at thick trace

step 5 adding fragrance

 add scents or blended scents and mix quickly, then pour the soap mixture into the prepared mould



fig 21: pouring the mixture into the mould



fig 22: level the mixture in the mould

step 6 allow the soap to harden

- cover and wrap the mould in a blanket or towel
- leave for 18 to 24 hours to complete the process



fig 23: leave the soap to set

step 7 remove the soap from the mould



fig 24: uncut soap block

step 8 cut the soap into bars



fig 25: soap cutter



fig 26: soap block in the soap cutter



fig 27: finished soap bars

 leave the soap to cure for 4 weeks in a warm, ventilated area before using

cold process soap recipes

pure and simple castile

This is for the most sensitive skin.

oil blend

68g castor oil 204g coconut oil 1089g olive oil

caustic solution

174g caustic soda 453g water

additives

(Add at or after trace) 25g chamomile powder

colour

From additives

fragrance

None

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

rosemary and nettle shampoo bar

It is believed that nettles eliminate dandruff and promote hair growth.

oil blend

136g castor oil 408g coconut oil 68g cocoa butter 748g olive oil

caustic solution

188g caustic soda 453g water

(Add at or after trace) 10g nettle powder 10g rosemary powder

colour

From additives

fragrance

15g rosemary essential oil 5g cedarwood essential oil 10g pine essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

rosemary and nettle hair rinse

This is a lovely after-shampoo rinse to use with the shampoo bar.

main ingredients

handful of rosemary leaves handful of nettle leaves 1 litre of water

additives

3g rosemary essential oil 2g cedarwood essential oil 2g pine essential oil 100g lemon juice 30g vodka

method

- place the rosemary and nettle leaves and water in a large saucepan.
 Bring the mixture to the boil and simmer it for five minutes. Leave it to cool.
- filter the cooled herbal fluid through a coffee filter paper into a glass jar. Secure the lid.
- add the essential oils to the vodka, then the lemon juice, and shake the jar well.
- add the additives mixture to the herbal fluid in the glass jar. Secure the lid.
- allow the mixture to infuse for at least an hour.
- shake well before use.

sunshine hemp

This is made with a high proportion of sunflower oil as it contains skinloving vitamins and costs less than olive oil.

oil blend

340g coconut oil 340g palm oil 680g sunflower oil

caustic solution

187g caustic soda 453g water

additives

(Add at or after trace)
40g hemp seed oil
25g calendula petals, chopped
10g hemp seed powder
10g orange zest

colour

From additives

fragrance

10g blend of peppermint and spearmint essential oils; blend as desired. 10g *Litsea cubeba* essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

fresh and minty

This produces a very hard soap with large bubbles. It is perfect for both normal and oily skin and refreshes you in every way.

oil blend

567g coconut oil 397g olive oil 170g palm oil

caustic solution

176g caustic soda 378g water

(Add at or after trace)
¹/₄ cup (60ml) powdered peppermint leaves

colour

From additives

fragrance

50g blend of peppermint and spearmint essential oils, blend as desired.

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

aloe vera and eucalyptus

This will become a favourite for all the family as the aloe vera provides healing properties while the eucalyptus oil refreshes the skin.

oil blend

567g coconut oil 397g olive oil 170g palm oil

caustic solution

176g caustic soda

378g water

Fresh aloe vera liquid made from a fresh, medium-sized aloe vera leaf liquidised with fresh water. Use this as part of the liquid for the caustic solution.

additives

(Add at or after trace)
28g cocoa butter, melted

colour

From additives

fragrance

57g eucalyptus essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

spicy licorice

This soap has strong antibacterial properties and can be used all over the house.

oil blend

567g coconut oil 397g olive oil 170g palm oil

caustic solution

176g caustic soda 378g water

additives

(Add at or after trace)
28g cocoa butter, melted
10g ground fennel seed
10g finely ground star anise powder

colour

From additives

fragrance

10g sweet fennel essential oil 20g star anise essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

coffee

This makes a good deodorant soap and can also be used in the kitchen. It has a beautiful aroma and colour.

oil blend

567g coconut oil 397g olive oil 170g palm oil

caustic solution

176g caustic soda

378g water

50g ground coffee – add this to the water and dissolve it completely before starting to make the soap.

(Add at or after trace)

28g shea butter, melted

1 cup (240ml) dark-roasted coffee beans, finely ground

20g cinnamon powder

colour

From additives

fragrance

28g star anise essential oil

10g cinnamon oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

oatmeal beauty soap

This is good for the complexion. It has a natural, wholesome scent of oatmeal.

oil blend

567g coconut oil

397g olive oil

170g palm oil

caustic solution

176g caustic soda

378g water

20g honey – add this to the water and dissolve it completely before starting to make the soap.

additives

(Add at or after trace)

28g shea butter, melted

1 cup (240ml) oatmeal

colour

From additives

fragrance

None

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

lavender

This is a soothing creamy soap. The lavender essential oil offers stimulating and antibacterial properties to the soap.

oil blend

567g coconut oil 397g olive oil 170g palm oil

caustic solution

176g caustic soda

378g water

20g honey – add this to the water and dissolve it completely before starting to make the soap.

additives

(Add at or after trace)
28g avocado essential oil
½ cup (120ml) powdered lavender flowers

colour

From additives

fragrance

57g lavender essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

runaway bayrum

This is a lovely spicy soap reminiscent of my childhood days walking from school in the afternoon through the bayrum trees.

oil blend

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

caustic solution

196g caustic soda 453g water

(Add at or after trace)

28g cocoa butter, melted

15g pimento powder

15g clove powder

15g vanilla pod powder

colour

From additives

fragrance

15g pimento essential oil

5g clove essential oil

10g camphor essential oil

15g Litsea cubeba essential oil

temperature

35-38°C (98-100°F)

Please follow the instructions given on pages 63 to 74.

troubleshooting

no trace

If the soap mixture does not 'trace' or thicken, it could be that the caustic soda is no good. It is best to discard the batch.

curdling

If the soap mixture begins to look lumpy like cottage cheese it could be that you miscalculated the oils or caustic soda or combined the oils and caustic soda at too high a temperature. It is best to discard the batch.

separation

This happens in the soap mould when a layer of oil appears on the top. It may be caused by incorrect measurement of oils and caustic soda. It is best to discard the batch.

seizure

This happens when some essential oils, such as cinnamon and clove, are added to a soap mixture and results in the rapid thickening of the soap mixture. Quickly scrape the mixture into the mould. The soap will look unattractive but will be fine to use after curing.

air pockets containing liquid

It is best to discard this soap as it is unsafe to use.