

Öbergs tvål

Method guide: bar and liquid soap

A step-by-step safety-focused guide to cold process, hot process, CPOP and liquid soap.

Säkerhetsnot: Denna guide är för kunskap och planering. Använd alltid en aktuell lutkalkylator, produktens säkerhetsdatablad och skyddsutrustning. Publicera eller sälj inte en kosmetisk produkt utan att uppfylla tillämpliga regler.

Safety and planning

Work with safety goggles, chemical-resistant gloves, covering clothing and ventilation. Keep children and pets away. Have running water available. Use heat- and alkali-safe stainless steel or PP/HDPE containers - never aluminium.

Always keep a batch record: date, oils in grams and percent, calculator, alkali purity, superfat, water amount, temperatures, additions and mould. A calculator is not optional: every oil has its own saponification value.

Bar soap is calculated with NaOH. Liquid soap and soft soap are calculated with KOH. They are not interchangeable. Always add alkali to water, never water to alkali.

Cold-process bar soap

1. Formulate oils by percentage and check them in a current lye calculator. For skin soap, 5 percent superfat can be a thoughtful starting point, but every formula must be tested and documented.
2. Weigh oils and butters separately. Weigh distilled water. Weigh NaOH separately in a dry container. Add NaOH slowly to water while stirring and let it cool safely.
3. Melt solid fats, add liquid oils and bring both oils and lye solution to a selected, controlled temperature range. Do not chase a 'magic' number - formula, additions and mould matter.
4. Pour the lye solution through a sieve into the oils. Stick blend in short bursts to light trace. Add only considered, documented additions.
5. Pour into the mould. Insulate or cool according to the formula and watch for overheating. Cut when stable. Cure at least 4-6 weeks, or longer when the formula needs it.

Hot-process bar soap

1. Calculate, weigh and mix the lye solution exactly as for cold process. Safety requirements are the same.
2. Blend to stable trace and heat very gently in a suitable pot or slow cooker. Stir only as needed and avoid splashing.
3. When the mass is evenly cooked and saponification has advanced, let it cool to a workable consistency. Only then consider temperature-sensitive additions.

4. Pack into the mould. Hot-process soap can be used sooner than cold process, but drying time makes it harder and longer-lasting.

CPOP - cold process oven process

1. Make cold-process soap through the mould stage. Use only a mould designed for oven heat.
2. My gentle CPOP variation holds the mould at about 65 °C for roughly two hours. Then switch the oven off and leave the mould in the residual heat overnight. Use only an oven-safe mould and monitor the process – formula and mould can develop heat differently.
3. CPOP can create a more even gel phase and faster unmoulding. It does not replace cure and drying time; cure a bar soap for at least 4–6 weeks.

Liquid soap and soft soap

1. Select KOH in the calculator and enter your KOH's actual purity. Liquid soap is a separate method, not bar soap with extra water.
2. Build a soap paste from a controlled oil blend and KOH solution. Let the paste fully saponify before diluting.
3. Dilute gradually with warm distilled water. Document every step. Let the product rest and assess clarity, stability and use before any further adjustment.
4. A product intended for sale requires its own safety assessment, documentation and correct labelling.

Sources: Bramble Berry Lye Calculator; Soap Queen, CPOP Swirls; Swedish Medical Products Agency guidance on cosmetics. Accessed 2026-08-03.