

Öbergs tvål

Start making soap

A practical introduction to equipment, safety, raw materials, chemistry and your first bar soap.

Safety note: Never work with lye without safety glasses, chemical-resistant gloves, covering clothing and good ventilation. Use a current lye calculator and the raw material safety data sheets. Always add lye to water - never water to lye.

1. A strong place to start

Soapmaking is both craft and chemistry. You learn through well planned batches, notes and patience. Do not begin with the most advanced soap. Begin with a simple formula, a safe workspace and the aim of understanding what is happening.

This guide is based on Peter Öberg's course material and adapted for the website. It focuses on bar soap. Liquid soap and soft soap use potassium hydroxide, KOH, and must not be confused with bar soap calculated with sodium hydroxide, NaOH.

2. Equipment that makes a difference

Use a digital scale accurate to the gram. Weigh oils, water and NaOH separately. Volume measures are not sufficiently precise for alkali or recipes.

You need heat- and alkali-safe vessels in stainless steel or PP/HDPE plastic, an immersion blender with a metal blade, a silicone spatula, thermometer, mould, safety glasses and chemical-resistant gloves. Never use aluminium: it reacts with strong alkali.

Prepare your workspace before you start. Keep everything within reach, keep children and pets away from the work area, and choose a time when you do not need to rush.

3. Safety before creativity

NaOH is strongly corrosive. Store it dry, labelled and out of reach of children. Always use safety glasses, gloves, covering clothing and good ventilation. Follow the raw material safety data sheet.

The most important rule is simple: always add lye to water, never water to lye. Add NaOH slowly to the water while stirring. Let the solution cool in a safe place. Keep running water available and avoid breathing the fumes while mixing.

If you sell soap, separate cosmetic rules apply. This guide is about knowledge and method; it does not replace the safety assessment, labelling or documentation required before sale.

4. Oils, saponification values and superfat

Oils shape a soap's character: coconut oil contributes cleansing and lather, olive oil a gentler and creamier character, castor oil can help support lather, and shea butter adds body. No oil is simply good or bad: amount, combination and intended use matter.

Palm oil can add hardness and stability, while palm kernel oil behaves more like coconut oil with cleansing and lather. Linseed oil gives a soft, distinctive character but is rich in polyunsaturated fatty acids; use fresh oil, choose a considered percentage and store it cool and dark.

Every oil has its own saponification value. This describes how much alkali is needed to react with that particular oil. Never replace an oil in a recipe without recalculating in a current lye calculator.

Superfat means deliberately using a little less alkali than the theoretical amount. For a hard body soap, 5 percent can be a considered starting point. It does not mean a particular oil is guaranteed to remain unsaponified; it is a calculation margin for the entire blend.

5. Your first bar soap - step by step

1. Choose a simple, well documented recipe with no more than three oils. Enter the oil percentages in a lye calculator and select your total oil weight. Specify NaOH, the actual purity of the raw material and 5 percent superfat. Check the result once more.
2. Weigh the oils. Melt solid fats gently and add liquid oils. Weigh distilled water and NaOH separately. Then add NaOH to the water slowly while stirring.
3. When the oils and lye solution are both below 40 °C and close to one another in temperature, pour the lye solution through a sieve into the oils. This is a practical guideline, not a replacement for the temperature plan of the individual formula. With honey, beer or tar, work cooler and more slowly: these additions can raise heat and thicken the batter quickly. Blend in short intervals to light trace: a ribbon from the blender remains briefly visible at the surface.
4. Pour the batter into the mould. Gently shake or tap it so larger air pockets release. Record the date, recipe, temperatures and all deviations in your batch log.
5. Leave the soap undisturbed. Cut when it is stable. Then cure the bars with airflow for at least 4-6 weeks. Curing generally makes soap harder and more pleasant to use.

6. Three methods for bar soap

Cold process, CP: the most shapeable method. Work to light trace, pour into a mould and cure for at least 4-6 weeks. It suits learning a recipe and working with a calm batter.

Hot process, HP: the batter is heated carefully after trace. The result is often more rustic and may be used sooner, but drying time remains valuable.

CPOP: cold process soap given controlled oven heat. Peter Öberg's gentle variation is around 65 C for about two hours; then the oven is turned off and the mould stays overnight in the residual heat. This is not a universal rule: mould, recipe, size and additives can develop heat differently. CPOP soap still needs to dry and cure.

7. Learn from every batch

Use a batch log. Record date, oils in grams and percent, lye purity, water amount, superfat, temperatures, additives, mould, unmoulding time and how the soap feels after curing.

Change only one thing at a time. Then you can understand whether a difference comes from the oil, temperature, water amount, mould or working method. That is how the craft becomes your own.

Once you are confident with a simple batch, you can move on to colour, clays, salt, beer, hot process or CPOP. Let curiosity follow safety and calculation: then the journey becomes both more enjoyable and safer.

8. Two personal percentage formulas

Peter's luxurious Mediterranean soap: 50% olive oil, 15% coconut oil, 15% palm kernel oil, 15% shea butter and 5% castor oil. I experience it as full-bodied and creamy, with a steady, calm lather. It is a personal formula inspired by Mediterranean soap traditions, not a claim to be a traditional Marseille soap.

Peter's winter soap: 35% linseed oil, 20% shea butter, 15% coconut oil, 15% palm kernel oil, 10% olive oil and 5% castor oil. Linseed oil gives a more distinctive, less bubble-driven and creamy character. Make small, well documented batches and check that the material is fresh.

Important boundary: The formulas are given only in percentages. Always calculate NaOH, liquid and actual lye purity in a current lye calculator for the exact oil weight you will use. Never use an old screenshot or someone else's gram values without a new check.

Basis and further reading: Peter Öberg, Soapmaking course presentation; Bramble Berry Lye Calculator; Swedish Medical Products Agency guidance on cosmetics. Read 2026-08-04.