

the fundamentals

weights and measures

The success or failure of a batch of soap depends on a number of variables, including having the correct proportions of base ingredients, temperature and other factors. All of the recipes in this book contain the correct amounts of fats and oils and alkalis to produce mild, gentle and moisturising soaps and the fats and oils are also formulated for their skin care properties.

The recipes will provide approximately 12 average-sized (100g) bars of soap and about 6lb (2.72kg) liquid soap paste and 5lb (2.26kg) cream soap. All quantities indicated in the recipes are weighed quantities.

temperature

Soap requires a certain amount of heat to saponify properly. I recommend using a temperature range of 37-38°C (98-100°F) when combining both the fats and oils and the alkali solution for the bar and liquid recipes in this book and 72°C (161°F) for making the cream soaps. It is very important that both the fats and oils and the alkali solution are at or very close to the same temperature within the range.

trace

This is the first stage after the oils and the alkali solution are added together and properly mixed and when the mixture starts thickening. Light 'trace' is the point where the mixture turns from clear to creamy and can be easily drizzled off the hand blender forming a light pattern on the surface. Medium 'trace' resembles the consistency of a thin pudding mix and heavy 'trace' resembles a thick pudding mix and the path of the hand blender is clearly visible on the surface of the mixture.



fig 1: mixture at light trace



fig 2: mixture at medium trace



fig 3: mixture at thick trace

super fatting

This is a way of ensuring that you do not produce an alkali-heavy soap. It's done: either by discounting the initial alkali or by adding excess fats and oils at the trace stage. Super fatting produces thick creamy soaps.

setting times

These are dependent on a number of factors such as ingredients and room temperature. On average the bar soap recipes presented here should be hard enough to be released from the moulds twenty-four hours after pouring and should have the consistency of hard cheese.

cutting and curing

After removing the soap from the moulds, cut it into bars using a cheese wire or a flat-bladed knife, stack them on a ventilated plastic tray in a well-ventilated room and, if the 'cold process' method has been used, continue the curing process for at least twenty-eight days.

During the curing process the appearance of the soap will change. Fine white dust may appear on the surface of the soap, which can be washed or scraped off once the process is completed. Bar soap will also shrink during the curing process and some colour additives and botanicals will fade, so it is a good idea to turn the soap regularly to enable equal exposure to light.

translucence

When using the hot process method, the soap paste for bar, liquid and cream recipes should change in appearance from off-white to translucent after approximately two hours of cooking the soap mixture in the slow cooker. This also indicates that the soap is neutralised.



fig 4: translucence

dilution

Once the liquid soap paste has been cooked to translucence it is ready for dilution. Add the required amount of water to the soap paste in the slow cooker and cook on medium until the paste dissolves completely.

sequestering

Allowing the diluted liquid soap to rest for approximately two weeks enables any clouding to settle out of the solution and for whipped cream soap to develop a beautiful pearlescent sheen.