



Contents

INTRODUCTION VIII

PART 1
**YOUR SOAPMAKING
PRIMER**

CHAPTER ONE

Understanding Natural Soapmaking **3**

CHAPTER TWO

Gathering Supplies **9**

CHAPTER THREE

Base Carrier Oils **17**

CHAPTER FOUR

Natural Additives, Colorants & Scents **25**

PART 2
**TECHNIQUES &
TUTORIALS**

CHAPTER FIVE

Cold-Process Soapmaking **41**

CHAPTER SIX

Decorative Techniques **57**

CHAPTER SEVEN

The Basics **73**

CHAPTER EIGHT

Specialty Bars **99**

CHAPTER NINE

Get Creative **133**

CHAPTER TEN

Something Seasonal **159**

CHAPTER ELEVEN

Designing Recipes, Wrapping Soaps, and More **187**

PART 3
THE RECIPES

MEASUREMENT CONVERSIONS 195

RESOURCES AND SUPPLIES 196 • REFERENCES 197

RECIPE INDEX 198 • INDEX 200

Introduction

Most people who want to start living a healthier life begin with the ingredients in their food. That's what I did. But it wasn't long before I was reading the labels on shampoos, lotions, and soaps, too. The more I investigated, the more I wanted to find products with simple, natural ingredients.

It wasn't until I met Kathy from Milk & Honey Soaps that I realized that I could make my own as well, not to mention shampoo bars, shaving bars, and laundry bars. The problem was I had no idea where to start. The few books that I found were way too advanced, focusing on complicated techniques with little background information. After some time, I managed to slowly piece together information from a number of different websites and books until I was ready to give my crazy soapmaking idea a try.

One thing I did understand at this early stage was that almost every botched batch of soap can be fixed. That's right! Since I was on an extremely tight budget, this was encouraging and helped me relax and get excited about the possibilities. I didn't have any soap molds, of course, and I didn't want to purchase one (remember: tight budget). Instead, I checked every glass and plastic container in my house for one that had square corners and sides.

Surprisingly, most containers in my home have curved edges. I ended up going to a thrift store and finding a sturdy square hat box and a wooden planter that was narrow enough to be the perfect size.

My first batch of soap was a Castile soap—a soap made almost entirely of olive oil. Of course, I didn't know that Castile soaps are notorious for not reaching trace (the stage when the raw soap begins to thicken). As a result, I almost burned out my hand mixer before giving up and pouring it into my hatbox soap mold. I was shocked and happy to see that 24 hours later it was wonderfully hardened and ready to cut!

After making hundreds of soap batches, I have developed a deep love and appreciation for the art. All soapmakers develop their own specialties and styles that suit them. To those just beginning their soapmaking journeys, I always say that making soap is like baking a cake. If you can follow a recipe, then you can

make soap. It seems complicated at first, but the more you do it, the better you get! You wouldn't start with an extremely advanced cake with many steps and specialty tools. You would want to start with a simple recipe and work up to that stage by having fun, learning new techniques, and improving your skill. The same goes for making soap.

My goal with this book is to demystify the soapmaking process. It is meant to be a comprehensive resource for entry-level soapmaking. Instead of having to piece together instructions and tips from different books and websites in order to learn the art of soapmaking, I'm bringing it all together for you in this one book. This is the book I would have wanted to have when I first started making soap.

In the following pages you will find extensive lessons and tutorials that will help you understand the full process of making your own soap. I'll cover all the basics of how and why, including what could go wrong and what you can do to fix the problem. Then I will get you started on more advanced techniques, like how to create swirls of natural color and add herbal infusions.

And remember: All these soap recipes are made with natural ingredients! I will not suggest the use of artificial dyes or fragrances. In fact, it's the opposite. I'll give you a lot of great ideas for coloring and scenting your soaps naturally. I am committed to using only healthy ingredients that nourish your body. In my eyes, it makes no sense to go to all the trouble of making your own soap and then turn around and add the kinds of toxic ingredients that many commercial manufacturers use. I hope you enjoy your first step into the soapmaking world, and I can't wait to guide you through the process.

HOW TO USE THIS BOOK

If you are new to soapmaking, the best way to begin is to familiarize yourself with the essentials. I will go over the basics in part 1, including supplies, oils, additives, colorants and scents. I will guide you through everything you need to know about basic cold-process soapmaking.

After you've read through the basics, you can jump into part 2. There I'll outline the cold-process techniques used in the recipes in this book, and provide tutorials to help put the skills you are learning into practice. Begin with the cold-process tutorial, which includes the perfect starter recipe for beginning soapmakers. From there, you'll find tutorials on decorative techniques including embossing, layering, and swirling to take your soaps to the next level.

Part 3 covers basic recipes, specialty bars, creative bars, and seasonal recipes. Once you feel comfortable with the basic recipes, don't be afraid to dive into specialty bars and get creative. Everyone loves a seasonal soap bar! Finally, we will go over how to package your soap to protect it and show it off.

Use this book as both a learning tool and a reference book. There are key terms, problem-solving ideas, and information to help you understand more about the soapmaking process. It is all about having fun and being creative, so let's get started.

PART

1





Your Soapmaking Primer

Part 1 is all about the basics. Each chapter will build on information that I have presented, breaking down the entire soapmaking process into pieces that are easy to understand and categorize.

In this section I will outline what soap is and what is happening scientifically when you combine your ingredients. We'll discuss the general soapmaking process, what supplies you will need, and the different properties that fats and oils will bring to your creations. I'll also provide many options for natural colors and scents so that you can keep your soaps natural and healthy while making them look and smell beautiful.

In other words, it's everything you need to get ready to make your first batch of soap. Not to mention, this will be a great resource for you to come back to for ideas once you've advanced in your soapmaking skills.



*chapter
one*

UNDERSTANDING NATURAL SOAPMAKING

Welcome to soapmaking! In this chapter we'll discuss the foundations of soapmaking. For example, what is soap? What makes natural soap different from the soaps you'll find in most stores? What are some of the benefits of soapmaking? I'll answer these questions and take you through some basics so that you can begin to break down the process into easy steps. I'll also define key terms that you will encounter as you dive into this fun and creative craft.

GET EXCITED

Soapmaking can be as creative as your imagination allows. I will help you start by sharing basic recipes and building your confidence until you are experimenting and creating soaps on your own. If you've always wanted to make goat milk and honey soap, then you're in luck. How about Castile soap, soap for sensitive skin, or soap for babies? I've included a lot of specialty soaps like shampoo bars, shaving bars, and soaps made with essential oils that are known to help calm allergies. I've even included camping soaps like a jewelweed soap to help prevent poison ivy and poison oak reactions and an insect-repelling soap with citronella and other essential oils that combine to make a pleasant aroma for you, but an effective deterrent for bugs.

Maybe you're interested in soap because you're creative and want to make beautiful soaps with layers, stripes, and swirls. I'll give you the techniques to make sure you are ready to explore your artistic side. Remember, even if I give you step-by-step instructions for natural coloring and scents, you can always mix and match ideas from other recipes. Scents and colors are easy to substitute. Oils are a bit trickier, needing some calculations, but I'll show you how to do substitutions so that you'll be making your own recipes by the time you are finished.

WHAT IS SOAP?

There's no better way to understand something than to make it, but without background knowledge you can sometimes feel a bit lost. Which is why I can't teach you how to make soap without first answering the fundamental question: What is soap?

Put simply, when lye water is added to oils, there is a chemical reaction called saponification. Just as your elementary school vinegar and baking soda volcano eruption demonstrated a chemical reaction when two ingredients came together to make something completely different, the saponification process is a chemical reaction between fatty acids (oils, butters, fats) and sodium hydroxide (lye) that makes something new: soap. Recipes are developed with the goal of using all the lye during saponification so that no lye remains in the final soap product.

People have been making soap for centuries. Farmers would use every part of their animals, including the fat, to make things like candles and soap. Later, certain regions became famous for their olive oil and laurel berry oil soaps. My grandmother used to make soap with her mother using potassium hydroxide, or what she called potash, by taking the ashes from the fire, mixing it with straw, and running water through it for a few weeks. This would create a strong enough liquid to react with the fats they had saved to make a soft soap that they would scoop out of a tin and use on dishes, clothes, and even their bodies. Using these same age-old principles with a modern method, you'll soon be doing this kind of science in your own kitchen.

THE BENEFITS OF FROM-SCRATCH SOAP

Before you dive into any new project, it's helpful to understand the benefits of what the project will provide. When it comes to soapmaking, there are huge benefits to making your own from scratch.

Knowing Your Ingredients

This is the most important benefit for me and my family. When you make your own soap from scratch, you know exactly what is going into it. You make the decisions on what is healthy for your skin and for the skin of those you love. No processing procedure or GRAS ingredients (ingredients that the government determines to be “generally recognized as safe” and thus do not need to be listed on a label) are getting into your soap because you are in full control.

Store-bought soap often contains artificial ingredients. Though there are a lot of toxic ingredients that I will not list here, most of them are used as artificial coloring, synthetic fragrances, and additives in specialty soaps. Those may look and smell pretty, but they are not natural and definitely not what I would consider healthy. Even homemade soapmakers may fall into the trap of using fragrance oils and pigment powders. In my opinion, why go to all the trouble of making something with wonderfully nourishing oils and then ruin it by adding toxic ingredients?

In this book you will not find any suggestions for fragrance oils or artificial pigments and additives. You do not have to compromise quality. Instead, you will have fewer problems and difficulties in making your soap because, more

often than not, it is artificial ingredients that cause botched batches. You will be blown away by the beautiful colors and amazing scents that you can create without any unnatural ingredients. I am committed to providing you with the kinds of recipes and products that I would give to my own family.

Health Benefits

Your skin is the largest organ on your body, and it is extremely absorbent. The products that you put on your skin affect your overall health. When you make soap from scratch, you not only know your ingredients but you control them. You can add essential oils for aromatherapy benefits, as well as clays, charcoal, and herbs to address acne and other skin concerns.

Saving Money

If you want to be healthy, buying premade organic and premium products can become really expensive. When you make your own, there is an initial cost to the ingredients, but once you have them on hand, you can make enough soap for family and friends and still have ingredients left over to make lotions, lip balms, and other bath and body products.

Self-Sustainability

One of the reasons I started my company, Simple Life Mom, was because I wanted to learn how to make more of what we use on a daily basis. I value being able to have the choice to buy or make my own products. Soap, shampoo bars, shaving bars, laundry bars—these are all things that we use on an almost daily basis and that we can create ourselves.

Pride and Satisfaction

There is something very exciting about making a beautiful batch of soap with your own hands. It'll get you hooked, in a good way. My first batches were made with makeshift molds, and the results were funky shapes and sizes. I still couldn't have been prouder. I was like a little girl making her first batch of cookies. I still feel the same way today.

Learning a Marketable Skill

Many people today are searching for pure and natural bath and body products. Who knows? You could end up starting a very successful home business., just as I did.

THE BASICS

Soapmaking from scratch can seem confusing at first, but I like to break the process down into categories and simplified steps. The steps you see here are the same steps you will see in the recipes. An understanding of what is happening at the molecular level will also help you visualize each step and why it is necessary.

The Science

For saponification, you need long-chain fatty acids (oils, butters, fats) and sodium hydroxide (lye). Every oil has a unique combination of three fatty acids attached to a glycerol. This is why each soap recipe calls for more than one oil: Each oil brings a different combination of fatty acids and reacts with the lye differently. A soap made from multiple oils will have multiple benefits—like moisturizing, conditioning, and cleansing. When the lye and fatty acids are

mixed together, the fatty acids release glycerol molecules that bond with the lye. This chemical reaction creates soap (technically a salt). The glycerin releases when you use it and nourishes your skin.

The Process

It's helpful to think of a soap recipe in three parts:

- 1. Oils and fats.** You will weigh the oils, fats, and waxes in your recipe, melt them together, and then let the mixture cool to around 110°F.
- 2. Lye water.** After measuring the lye and water separately, you will pour the lye into the water. Do this outside! Be sure to read the “Safety First” section in the next chapter and follow those steps carefully to have a safe soapmaking experience. Once combined, allow the mixture to cool to around 110°F.
- 3. Essential oils and other natural additives.** After everything is cooled to around 110°F, you will pour the lye water into the oils and blend until trace. Trace occurs when the soap mixture thickens enough that when you drizzle some over the top of your mixture with a spoon, you can see a trace, or trail. This is often when scents and colors are added, though sometimes colors are added to lye water or oils (I will cover that later).

All that's left to do at this point is pour your beautiful creation into a soap mold and insulate for 24 hours before taking it out, cutting it, and letting it cure. It's that simple! But don't worry—I'll go into a lot more detail in the following chapters.

Key Soapmaking Terms

COLD-PROCESS: The process of making soap at room temperatures or slightly above. No heat needed besides melting the fats together. Makes a smooth, hard bar.

FATTY ACIDS: Carbon, oxygen, and hydrogen compounds in fats. Types referred to in soapmaking: linolenic, lauric, myristic, palmitic, stearic, oleic, ricinoleic acids. Each one of these will provide different properties to your soaps.

GEL PHASE: When the saponification begins, the soap will heat slightly and can enter a gel stage, when the entire bar becomes darker and almost translucent. After this stage is complete, the mixture will lighten in color and harden.

HOT-PROCESS: The process of heating soap over low heat. Soap is ready to use immediately after cooling, but will result in a different texture than what the cold-process provides.

LARD: Fat rendered from a pig.

POTASSIUM HYDROXIDE (KOH): This is also called potash and is used to make softer soaps. Liquid soaps often use potassium hydroxide as a base.

SAP VALUE: Every fat and oil has a different SAP value, the number of milligrams of sodium hydroxide or potassium hydroxide required to saponify one gram of that particular type of fat or oil.

SAPONIFICATION: The chemical reaction that occurs when lye, water, and oils are combined. Fatty acids release the glycerol molecule and bond with the lye. This chemical reaction creates soap (technically a salt) and releases glycerin to nourish your skin.

SOAP ASH: A white residue that can form on the surface of soap. It's hard to say why this occurs, because it doesn't seem to be consistent, but it is more likely to form when soap doesn't fully reach the gel stage or is cooled too quickly.

SODIUM HYDROXIDE (NaOH): The chemical name for lye, this is an alkali (base) used to react with fats and create soap.

SUPERFATTING: The process of using less lye so that more fats are left over after the saponification process (also known as lye discounting).

TALLOW: Fat rendered from cattle or sheep.

TRACE: The phase when soap is ready to pour. It thickens enough to leave a slight trace or trail when a spoonful is dribbled over the surface.