

Making Your Soap

In this chapter, we will look at the various techniques that can be used to make soap from the biodiesel byproducts. Once mastered, you will have a toolset that you can use to make wonderful bar and liquid soaps from biodiesel byproducts. In addition, you will learn some advanced techniques that will allow you to add transparency, color and scent to your biodiesel byproduct soap.

Equipment

Anything made of aluminum should be avoided. Aluminum equipment will react with your lye and potentially ruin the equipment and most certainly fail your soap.

Vinegar - Keep a bottle of vinegar around in case any accidents occur with the lye solution. Using the vinegar you will be able to neutralize the lye.

Rubber Gloves – When mixing the lye into the water or milk and then into your soap rubber gloves should be worn.

Eye Protection – Some sort of eye protection should be worn when mixing the lye into the milk or water and when mixing the lye into the soap.

Scale – A good scale accurate to 1/10 oz should be used when measuring ingredients. The ratio of lye to fats, oils, fatty acids and saponifiable elements is critical with ensuring full saponification without making the soap caustic hot.

Thermometers – The initial temperatures of the ingredients should be the same prior to mixing. You will also use thermometers to monitor the soap temperature in some of the hot processing techniques. Candy thermometers work well in that they are able to measure high temperatures. A laser thermometer is handy too.

Slow Cooker (Crock Pot) – One of the hot processing techniques mentioned in this manual uses a slow cooker. You must be sure you size your batch to the size of slow cooker you are using or vice versa. A good rule of thumb is that the cooker should be able to contain twice as much material as your batch size.