Utah State University EXTENSION

Soap Making, No Boil Method

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When correctly made, homemade soap is of high quality, ranking with some of the better commercial brands of soap. It can well be referred to as “one of the few remaining bargains” for homemakers today. A thrifty housewife can save many dollars a year on her soap bill by making her own soap.

Exactness in each step of the process is essential to successful soapmaking.

The basic ingredient of soap is fat. Any good animal fat and some vegetable fats may be used. Fats most commonly used include low grade fat from recently killed animals, bacon fryings, and roast drippings. Mineral oil cannot be used for soap making. A combination of hard and soft fats usually produces a soap of higher quality than does either used alone.

Fats are classified at follows:

- Hard fats—mutton, beef, and venison
- Soft fats—pork
- Very soft fats—poultry (cannot be used alone)

Preparation for Soap Making

Fresh Animal Fat

Wash fresh animal fat thoroughly with tepid water to remove all foreign matter, including blood. Dry with clean cloths or paper towels.

1. Trim rind from pork and all strips of meat from fat.
2. Grind fat with a food chopper using the medium-fine blade.
3. Place a kettle large enough so the fat will not spatter on the stove as it heats. Bring it to a boil. Do not heat to smoking temperature.
4. When fat is completely rendered, strain it through three or more thicknesses of cheesecloth, nylon hose, or other thin material to remove all solid particles. Cracklings of this kind have no value and should be discarded.

Used Fats

Used fats include bacon fryings and roast drippings. Heat the fat until it just reaches the boiling point. Strain in the same way as above.

Salty, Rancid, or Dirty Fats

These fats require special treatment. Pour into a large kettle and add about four times as much water as there is fat. Bring to a rolling boil. Add one quart cold water. Stir. Cool until the fat cakes. When the fat can be lifted off, scrape all foreign material from the bottom.

Stale or colored fats should be washed the second time. Proceed as for the first washing.

Mixing Fat and Lye

All weights, measurements, and temperatures must be taken accurately. Assemble supplies and equipment in advance of the day you plan to make the soap.

Equipment and Ingredients Necessary

Floating dairy thermometer.
Enamel or granite pan about 2 or 3 quart size for dissolving lye.
Measuring cup.
Scales to weigh fat.
Granite, enamel, galvanized, or heavy tin container of 3 or 4 gallon size for making soap (do not use aluminum).
5½ pounds freshly rendered or reused fats.
One can lye.
Two and one-half pints cold water.
Wooden paddle.

How to Mix

5. Put 2½ pints of cold water into the small enamel or granite pan. Add slowly the contents of a can of lye, stirring until dissolved. Set aside to cool.

6. Put 5½ pounds of clean fat in the large container. Place over heat. When melted, set aside until the temperature for mixing is correct for the kind of fat used. The temperature of the lye water solution is of equal importance. Temperatures vary:

Good lard or soft fat — 85 degrees F.
Lye water solution — 75 degrees F.
Soft stale fat — 100 degrees F
Lye water solution — 80 degrees F
Equal parts lard and tallow — 110 degrees F
Lye water solution — 85 degrees F
Straight tallow — 130 degrees F
Lye water solution — 95 degrees F

When making laundry soap, add 2 tablespoons borax to the lye solution and mix well. Borax increases the sudsing quality of soap. Ammonia, kerosene, and carbolic acid, when added to soap, help it little, if any, because the lye usually neutralizes them.

7. Place the container in which the fat was melted inside a bushel fruit basket lined with two or three layers of old cloths. This retards the solidification of the fat until it is mixed well with lye.

8. When both the fat and the lye mixtures are the right temperatures, slowly pour dissolved lye into the grease.

9. Stir with a wooden paddle until the lye and grease are thoroughly combined and mixture drops from paddle like honey. Stir slowly but not too long or the lye may separate. From 5 to 15 minutes is enough. The kind of grease used and the weather condition make the difference in the time required. Fats cool more quickly in cool weather.

10. Pour mixture into a mold or leave in container. A wooden mold soaked in cold water and lined with strips of wet cloth is suitable. Always set the mold inside another pan. This will

prevent damage to work surfaces should there be a separation of the lye and the fat.

11. Cover container of soap with a blanket or rug. Set is a warm place for a day or two. When ready to unmold, place mold on a cement floor or other place that will not be damaged if the lye is spilled. It is not unusual for a little lye to settle out in the bottom of the container. This spilled on a linoleum floor could do serious damage.

Toilet Soap

Toilet soap is made in much the same way as laundry soap. Any clean fat may be used. Four pounds of hard fat and 1½ pounds of soft fat make a mellow soap. Do not add borax to toilet soap; it is harsh on the skin.

Add six ounces glycerin, 3 teaspoons citronella or other oil base perfume, and some coloring matter to the fat-lye mixture immediately after the lye has been added. These ingredients should be the same temperature as the lye solution when they are added.

Reclaiming Soap

If a separation occurs, cut the soap in a kettle. Add all the lye that has separated. Never throw it away.

Add 5 pints of water to the mixture. Melt with gently heat and boil slowly until it becomes thick and syrupy. Pour into mold and cover in the same way as originally.

Some causes of separation:

- Exceedingly rancid fat.
- Salt in the fat.
- Too cold or too hot a temperature.
- Soap stirred too vigorously.
- Incomplete mixing of the fat-lye mixture.

Soap Making Tips

1. Never use an aluminum kettle to make soap.
2. Soap improves with age; fat deteriorates. Therefore use the fat before it is too old.
3. Poultry fat used alone makes soft spongy soap.
4. Oils that may be used for perfuming toilet soaps and amounts required are: Lavender, 3 teaspoons; lemon, 1 teaspoon; cloves, 1 teaspoon; rose geranium, ½ teaspoon; and citronella, 2 teaspoons.
5. Toilet soap may be colored a pale green by adding beet-top coloring. Place beet-tops in pressure sauce pan and cover with ½ cup water. Bring to 10 pounds pressure. Cool, then press through fine sieve. Have the mixture the same temperature as the lye and add it immediately after the lye has been added. Other coloring matter may be made from geranium, tulip, rose, or other deeply colored flowers.

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