

# Index

## A

Acid-base balance. *See* pH

"Actual" soap, 41

Additives

bubble baths, 80–83

clouding, causes of, 109

herbs, 45

neutralizers, 42

preservatives, 43

sequestering agents, 45

in shampoos, 60

superfatting, 43

thickening agents, 43–45

Alcohol, 8–9, 32, 45

Alcohol-free soap, 38

Alcohol/lye method

alcohol, mixing in, 35

basic recipes, 52

bubble bath, 84

double boiler, use of, 34

dyes and fragrances, adding, 40

fats and oils, heating, 34

fatty acids, testing for excess, 38

lye-water solution, adding, 35

pots, covering/weighing, 36, 37

problems/solutions, 107

sequestering/resting phase, 40

soap, neutralizing the, 39

soap broth, cooking, 37

soap broth, diluting, 39

techniques, 33, 55, 61

Alkali, 50, 115–16. *See also* Lye; pH

Almond oil, 5, 60, 80

Amber Allure (recipe), 75

Arabian Nights (fragrance), 101

Avocado oil, 5

## B

Baby shampoos, 64–65

Basic Shampoo, 61



## CONVERTING RECIPE MEASUREMENTS TO METRIC

Use the following chart for converting U.S. measurements to metric. Since the conversions are not exact, it's important to convert the measurements for all of the ingredients to maintain the same proportions as the original recipe.

To convert to	When the measurement given is	Multiply it by
milliliters	teaspoons	4.93
milliliters	tablespoons	14.79
milliliters	fluid ounces	29.57
milliliters	cups	236.59
liters	cups	0.236
milliliters	pints	473.18
liters	pints	0.473
milliliters	quarts	946.36
liters	quarts	0.946
liters	gallons	3.785
grams	ounces	28.35
kilograms	pounds	0.454
centimeters	inches	2.54
degrees Celsius	degrees Fahrenheit	5/9 (°–32)

Basic Shower Gel, 73  
Bath Balm (fragrance), 97  
Bath gels. *See* Gels, bath and shower  
Biocides, 12  
Blenders and blending, 16, 25, 49–50  
Borax, 30, 43–45, 60, 81, 111  
Boric acid, 11, 39, 42, 70  
Bottles and jars, 17  
Bubble baths  
  about, 79  
  foam builders and stabilizers, 80–83  
  recipes, 84–87  
Bubble-blowing soap, 81, 87  
Bungee cords, 17

**C**

Calgon, 11, 45, 81  
Canning pots, 16  
Canola oil, 2, 4, 5, 51, 80  
Carrageenan, 43, 45  
Castile Soap Shampoo, 100%, 65  
Castor oil, 6–7, 50, 60, 82, 116  
Castor Oil-Coconut Oil Shampoo, 62  
Castor Oil/Jojoba Moisturizing Soap, 54  
Castor Oil/Rosin Soap, 55  
Caustic potash, 8  
Cedar, 66  
Cedarwood, 66  
Cellulose derivatives, 43, 45  
Christmas Carnation (fragrance), 102  
Christmas Evergreen (fragrance), 96  
Cinnamon Forest (fragrance), 101  
Citric acid, 11, 12, 39, 42, 70  
Citronella, 66, 67  
Citrus Delight (fragrance), 96  
Citrus Refresher (fragrance), 95  
Clary sage, 12, 66  
Classical Romance (fragrance), 97  
Clean ‘n’ Green (dog shampoo recipe), 67  
Clear Springs, 9  
Cleopatra’s Milk Bath, 85  
Clouding/cloudiness, 8, 21, 45, 108, 109  
“Cloud point,” 8  
Clove, 66  
Cocoa butter, 3  
Coco-LoCo Shower Gel, 76

Coconut–Jojoba Fusion, 75  
Coconut oil, 2, 51, 52–53, 74, 80  
Coconut Oil Shampoo, 62  
Cold-process soapmaking, 20, 22, 89  
Concentrated soap solutions, making, 44  
Cooking pots. *See* Pots  
Corn oil, 4, 5  
Creamy Coconut Oil Soap, 53  
Curdling, 106

## D

Detergents, 1  
Dilution, guidelines for, 41–42  
Distilled water. *See* Soft (distilled water)  
Dog shampoos, 66–67  
Double boilers, use of, 16, 22, 34, 107  
Dream Weaver (fragrance), 98  
Dyes and fragrances. *See also* Essential oils  
  about, 88  
  alcohol-lye method, 40  
  bath and shower gels, 71  
  food coloring, 90  
  fragrance formulations, 93–102  
  paste method liquid soapmaking, 30–31  
  soap dyes, 90

## E

Eau de Cologne (fragrance), 100  
Emulsifiers, *viii*, 58  
Essence of Rosin Bubble Bath, 87  
Essential oils, 38, 60, 66, 91–92, 111  
Ethanol, 9, 32, 55  
Eucalyptus, 66  
Everclear, 9  
Exotic Blend (fragrance), 103

## F

Fats and oils. *See also* Fragrance oils  
  alcohol-lye method, 34  
  alkali proportions, 50  
  clouding, causes of, 109  
  hard fats, 2–3  
  oil blends, 49–50  
  paste method liquid soapmaking, 22  
  in shampoos, 60  
  soft oils, 4–7

Fatty acids, *viii*, 2, 4–5, 27, 38, 113–15  
Finishing agents, 58  
Flea control, 66  
Flower Child (fragrance), 98  
Foam builders and stabilizers, 80–82  
Foaming, 29  
Food coloring, 90  
Food processors, 16, 25  
For Men (fragrance), 99  
Fragrance oils, 30, 91, 111. *See also* Dyes and fragrances  
Fresh-Scent Blend (dog shampoo recipe), 66

## G

Gels, bath and shower  
  about, 3, 69  
  alternative methods, 72  
  making, procedure for, 70–71  
  recipes, 73–76  
  for summertime, 76  
Gentle Shampoo, 62  
Glossary, 118–20  
Gloves. *See* Goggles and gloves  
Glycerin, *viii*, 9, 32, 60, 81  
Goggles and gloves, 17, 23  
Goldilocks Shampoo, 63  
Grapefruit seed oil, 12  
Great Outdoors (dog shampoo recipe), 67  
Gums, 45

## H

Hair, 59. *See also* Shampoo  
Hard fats, 2–3  
Hard water. *See* Soft (distilled water)  
Hawaiian Islands Shampoo, 63  
Heavenly (fragrance), 99  
Herbal Flea Tamer (dog shampoo recipe), 66  
Herbs, 45, 102  
High-Foam Cold Cream Soap, 53  
High-Foaming Rosin Soap, 53  
High-oleic soft oils, 5  
Honey Pie (fragrance), 98  
Hot process soapmaking, 20  
Hot-process soapmaking, 16, 89, 90

Humectants, 9, 58  
Hydrolysis, 21  
Hydroxide solution, 114

## I

Indian Dream (fragrance), 94  
Island Breeze (fragrance), 98  
Isopropyl alcohol, 9, 29, 32, 55

## J

Jars, 17  
Jojoba, 7, 49, 50, 75  
Jojoba Conditioning Shampoo, 62  
Jojoba Moisturizing Soap, 54

## L

Lanolin, 7, 49  
Lanolin Soap, 55  
Lauric acid, 2, 58, 80  
Lavender, 45, 66, 84, 102  
Lavender–Patchouli Blend (fragrance), 99  
Lemon-Fresh Repellent (dog shampoo recipe), 67  
Lemon Refresher (fragrance), 97  
Lime Smoothie (fragrance), 100  
Linoleic acid, 4  
Linolenic acid, 4  
Liquid Silk Shampoo, 62  
Liquid soap. *See also* Bubble baths; Gels, bath and shower; Shampoo  
  formulating your own, 48  
  historical aspects, 47–48  
  simple and natural, 48  
Liquid soapmaking equipment, 15–17  
Liquid soapmaking ingredients  
  fats and oils, 2–7  
  other, 10–14  
  potassium hydroxide, 8  
  solvents, 8–9  
  waxes, 7  
Liquid soapmaking recipes  
  Castor Oil–Jojoba Moisturizing Soap, 54  
  Castor Oil–Rosin Soap, 55  
  Creamy Coconut Oil Soap, 53

High-Foam Cold Cream Soap, 53  
 High-Foaming Rosin Soap, 53  
 Lanolin Soap, 55  
 Liquid Soap with Palm Oil, 54  
 Mild Coconut Oil Soap, 52  
 Moisturizing Jojoba Soap, 54  
 100% Coconut Oil Soap, 52  
 Super-Mild Soap, 53  
 Liquid soapmaking techniques  
   additives, using, 42–45  
   alcohol/lye method, 33–40  
   basic, 19–45  
   blending technique, 50  
   blends, formulating, 47–55  
   blends, oil, 49  
   concentrated solutions, 44  
   dilution, guidelines for, 41–42  
   hot process, 20  
   lye proportions, calculating, 51  
   paste method, 22–32  
   principles of, 21  
   transparency, achieving, 21  
   troubleshooting, 105–16  
 Liquid Soap with Palm Oil, 54  
 Love Potion #7 (fragrance), 95  
 Lye solutions, 23, 51, 106. *See also* Alcohol-lye method

## M

Marketing techniques, 99  
 Marvelous Moisturizing Shampoo, 63  
 Meadow Garden (fragrance), 95  
 Mild Coconut Oil Soap, 52  
 Milk, powdered, 82  
 Milk Bath, Cleopatra's, 85  
 Milkiness, causes of, 9, 21, 27, 49  
 Mint Julep (fragrance), 98  
 Minty Dog (dog shampoo recipe), 67  
 Mist Pine Barrens Soap Blend (fragrance), 96  
 Mixed-tocopherol vitamin E, 12, 43  
 Mixers and mixing, 16  
 Moisturizing Jojoba Soap, 54  
 My Guy's Blend (fragrance), 96

## N

Naturally Wild for Men (fragrance), 93  
 Neutralizers  
   about, 11, 42  
   alcohol-lye method, 39  
   basic soap recipes, 52  
   bath and shower gels, 70  
   in bubble bath, 84  
   overaddition of, 110  
   paste method liquid soapmaking, 29–30  
   in shampoos, 61  
 Noir Blend (fragrance), 103

## O

Oils. *See* Fats and oils  
 Old Kent Garden (fragrance), 100  
 Oleic acid, 4, 5, 6, 80  
 Olive oil, 6, 55, 60, 80  
 Olive Oil Bubble Bath, 85  
 100% Castile Soap Shampoo, 64  
 100% Coconut Oil Soap, 52

## P

Palmitic acid, 2, 3  
 Palm oil, 2, 3, 49  
 Paste method liquid soapmaking  
   double boiler, preparing, 22  
   dyes and fragrances, adding, 30–31  
   fats and oils, adding, 22  
   fatty acids, testing for excess, 27  
   lye, adding to the oils, 24  
   lye solution, preparing, 23  
   problems/solutions, 107, 109  
   sequestering/resting phase, 31–32  
   soap, diluting the, 28–29  
   soap, neutralizing the, 29–30  
   stirring, 24–25  
 Patchouli–Almond Spice (fragrance), 97  
 Peanut oil, 4, 5  
 Pearl ash, 11, 23, 28  
 Pears Soap, 11, 99  
 Pennyroyal, 66  
 Pennyroyal–Citronella Special (dog shampoo recipe), 67

Peppermint, 66  
pH, testing/adjusting, 12, 38, 45, 112–16.  
    *See also* Neutralizers  
Phenolphthalein, 13–14, 42, 51, 112, 113  
Pine oils, 66  
Plastic sheeting, 17, 34, 36  
Potassium-based soap, 48, 49, 81  
Potassium carbonate, 11, 23, 28  
Potassium hydroxide, *ix*, 8, 23, 35, 51  
Pots, cooking/canning, 15–16, 22, 34, 36  
Powdered milk, 82  
Preservatives, 12, 31, 40, 43  
Pure Coconut Oil Bubble Bath, 85

## R

Rebecca's Patchouli (fragrance), 100  
Recipes  
    baby shampoo, 64–65  
    bath and shower gels, 73–76  
    dog shampoo, 66–67  
    fragrance formulations, 93–102  
    shampoo, 61–67  
Resource list, 121–27  
Resting phase. *See* Sequestering/sequestering agents  
Revitalizing Rosin Shampoo, 63  
Rich and Creamy Shower Gel, 75  
Rose geranium, 66  
Rosemary, 66, 84  
Rosemary extract, 12, 43  
Rose of Bengal (fragrance), 101  
Rosin, 10, 53, 54, 87  
Rosin Shampoo, Revitalizing, 63  
Rosin Soap, 55  
Rubbing alcohol, 9

## S

Safety procedures, 17, 23, 29, 34  
Safflower oil, 2, 4  
Saponification, *viii*, 50, 51, 108  
Scales, measuring, 15  
SDA3A and SDA3C, 9  
Sea Breezy (fragrance), 103  
Seaweed extracts, 45  
Sequestering/sequestering agents, 31–32, 40, 45, 115

Shampoo  
    about, 57–58  
    additives, 60  
    baby, 64–65  
    cleaning/conditioning, 58–59  
    dog, 66–67  
    formulations, 61–63  
    oils in, 60  
Shampoo recipes  
    Basic Shampoo, 61  
    Castor Oil-Coconut Oil Shampoo, 62  
    Clean 'n' Green, 67  
    Fresh-Scent Blend, 66  
    Gentle Shampoo, 62  
    Goldilocks Shampoo, 63  
    Great Outdoors, 67  
    Hawaiian Islands Shampoo, 63  
    Herbal Flea Tamer, 66  
    Jojoba Conditioning Shampoo, 62  
    Lemon-Fresh Repellent, 67  
    Liquid Silk Shampoo, 62  
    Marvelous Moisturizing Shampoo, 63  
    Minty Dog, 67  
    100% Castile Soap Shampoo, 64  
    Pennyroyal-Citronella Special, 67  
    Revitalizing Rosin Shampoo, 63  
    "Soapless" Shampoo, 65  
    Sudsy Fun Shampoo, 65  
    Vitamin E Hair Booster, 62  
    Woody Blend, 67  
Sheeting, plastic. *See* Plastic sheeting  
Shower gels. *See* Gels, bath and shower  
Signature Blend of Squeaky  
    Clean...Naturally! (fragrance), 101  
Simple Coconut Oil Gel #1, 74  
Simple Coconut Oil Gel #2, 74  
Smooth Operator (fragrance), 94  
Soap, *viii–ix*. *See also* Liquid soap  
    "Soapless" Shampoo, 65  
Soapmaking. *See also* Liquid soapmaking  
    historical aspects, 94  
    introduction to, *viii–ix*  
    language of, 74  
    marketing, 99  
Sodium-based soap, 48, 81  
Sodium borate, 11

Sodium hydroxide, *ix*, 8, 21, 51  
Soft (distilled water), 10, 27, 109  
Soft oils, 4–7  
Softsoap, 48  
Solvents, 8–9, 70  
Soybean oil, 4  
Sports Essential Blend (fragrance), 103  
Spring Scent (fragrance), 94  
“Starter” method, 25, 28  
Stearic acid, 2, 3, 5, 49, 58  
Stick blenders, 16, 24, 25  
Stirrers, 16  
Strawberry–Rhubarb Pie (fragrance), 102  
Sudsy Fun Shampoo, 65  
Sugar, 8, 10, 32, 45  
Sulfonated castor oil, 7, 43, 60, 64, 66, 82  
Sulfuric acid, 7  
Sultry Nights (fragrance), 95  
Summer Fun (fragrance), 94  
Summer Garden (fragrance), 97  
Summertime Smoothie, 76  
Sunshine Spirit (fragrance), 97  
Superfating agents, 21, 43  
Supermild Soap, 53  
Supersudsy Bubble Bath, 86  
Sweet Earth (fragrance), 95  
Sweet Harmony for Women (fragrance), 93

## T

Tallow, 2, 3, 49  
Tangerine Dream (fragrance), 99  
Tea tree, 66  
Thermometers, 15  
Thickening and thickening agents, 22, 25,  
43–45, 72, 106  
3 Cs Soap Blend (fragrance), 95  
Tocopherols. *See* Mixed-tocopherol vitamin  
E  
Too Sexy (Hers) (fragrance), 98  
Tracing phase, of soapmaking. *See*  
Thickening and thickening agents  
Transparency, achieving, 21  
Triglycerides, *viii*

Tropical Citrus Blend (fragrance), 101  
Troubleshooting  
about, 105  
alcohol-lye solution, 107  
alcohol stock become thick/gummy, 108  
alkali, correcting excess, 115–16  
borax, excess, 111  
cloudiness, 108–9  
emulsion appears curdled, 106  
emulsion separates when cooking, 107  
essential or fragrance oils, 111  
fatty acids, correcting excess, 113–15  
filmy residue on top of solution, 108  
mismeasurement of ingredients, 110  
neutralizers, overaddition of, 110  
oil-lye solution doesn't thicken, 106  
paste method, 107  
pH problems, correcting, 112–16  
“True” soap, 41  
“Turkey red oil,” 7

## V

Viscosity. *See* Thickening and thickening  
agents  
Vitamin E, 12  
Vitamin E Hair Booster, 62

## W

Water. *See* Soft (distilled water)  
Waxes, 7, 50  
Weighing, the soap, 36, 37, 70–71  
Whisks, 16, 24, 25  
Woody Blend (dog shampoo recipe), 67

## X

Xanthan gum, 45