

MASTER BREWERY INSTRUCTIONS

Brewing Basics

Beer ingredients are barley malts, sugars, hops, yeast and water. Combinations of these ingredients produce the varieties and styles of beer. Yeast ferments barley malts and sugars into alcohol while releasing carbon dioxide. Hops add bitterness and flavor. You will brew from highly refined “beer mixes” which are concentrates of barley malts and hops carefully blended by our Master Brewers.

Sanitation

There is one Cardinal Rule of Brewing: all of your brewing equipment and bottles must be washed, cleaned and “sanitized”. Sanitized means dipping or rinsing any equipment that will come in contact with fermenting beer in a solution equal in concentration to about 2 tablespoons of household bleach to 1 gallon of cold (tap) water. Wash or rinse the items in such a solution and then rinse the bleach solution off with tap water. Sanitizing kills microscopic bacteria which are detrimental to the beer.

Your First Brew

There are many recipes, techniques and processes of brewing which use the Mr. Beer™ Microbrewery System. These instructions will acquaint you with the basic principles of brewing. Our first recipe following instructions makes 8 quarts, equivalent to 20-12 oz. beers. This recipe produces a beer approximate in strength to a normal American commercial beer.

Let's Brew!

- 1) SANITIZE the MicroBrewer, lid, gasket, airlock assembly, tap, washer and nut. Open and close the tap several times to allow sanitizing solution to flow through it.
- 2) FIT the gasket inside the lid. Place the washer on the tap with the flat portion of washer up against the tap (it actually works either way) and ASSEMBLE the tap to the MicroBrewer. HAND TIGHTEN firmly by turning tap while holding nut on inside of the

MicroBrewer. Do not use wrenches or pliers to tighten. Test with tap water to make sure you have a good seal.

- 3) FILL the MicroBrewer with 2 gallons cold (tap) water.
- 4) In a large kettle or pot, bring $\frac{1}{2}$ to 1 gallon of water to a BOIL. Remove from the heat source and stir in the whole can of beer mix. (Option: Add 2 cups of ordinary white table sugar for a high alcohol strength. If you decided to brew the full measure of 6 gallons, add 4 cups of sugar). POUR the “wort” (pronounced “wert”, a brewer’s term for the mixture of malts, sugars, hops and water) into the MicroBrewer. ADD additional cold tap water to bring the volume to 4 gallons.
- 5) SPRINKLE the yeast from the packet on top of the wort, allow to sit for 5 minutes, then stir the wort. The brewer’s term is to “pitch” the yeast, meaning to add the yeast to the wort.
- 6) SCREW the lid and gasket assembly tightly onto the MicroBrewer. FILL the airlock with about $\frac{3}{4}$ ” of water and insert the assembly into the lid. Fermentation will start within 24 hours. While the wort is fermenting, carbon dioxide gas will be released through the airlock without allowing contaminants to enter the MicroBrewer.
- 7) Allow your beer to FERMENT and CLEAR seven (7) days at room temperature between 68° and 85° F. and out of direct sunlight. Actual fermentation time may be as little as one (1) day when you notice the airlock stops bubbling. Before bottling, however, wait for the beer to clear from the top down as the inactive yeast settles. When clear, it is then ready for bottling.
- 8) SANITIZE your bottles ,caps and filler tube.
- 9) ADD 1 $\frac{1}{2}$ tablespoons of ordinary white table sugar to each 2 liter bottle. (Use a piece of paper as a funnel to add the sugar.) Residual yeast in the beer will work on the sugar causing a secondary fermentation in the bottle after capping. This activity carbonates your beer. Be cautious, as too much sugar may over carbonate the beer, resulting in gushing or burst bottles. Too little sugar will result in a flat beer. The brewer’s term for sugar added to the bottle for carbonation is known as the “priming” sugar.
- 10) INSERT the bottle filler tube into the faucet, remove the airlock assembly, and fill the bottles leaving about a 2” headspace from the top of the bottle. Try not to disturb the yeast which has settled to the bottom of the MicroBrewer. Don’t worry if you do, the beer will clear again in the bottle. HAND TIGHTEN the bottle caps.

- 11) KEEP the bottles at room temperature (68° to 85° F.) for at least 7 days to allow carbonation. Using PET bottles allows you to see the beer clear in the bottle and to feel the bottle firm and harden as the secondary fermentation causes the internal pressure to build. After carbonation, STORE the beer upright in a cool dark place for several days or until the beer clears in the bottle. Your beer will improve in taste by allowing an extra week of maturing in the bottle.
- 12) YOUR BEER has been naturally brewed and carbonated and thus has a small yeast sediment at the bottom of the bottle. This is known as a “live” or “fresh” draft beer. The yeast is rich in Vitamin B and is good for you, but would cause the beer to turn cloudy if disturbed. When serving, pour in one continuous motion into a glass pitcher so as not to disturb the sediment. When cooling in the refrigerator, perfectly clear beer may appear hazy. This is also typical of naturally brewed beer as it is rich in proteins. Rinse the bottle immediately after use and re-use the bottle and cap many times. Drink your beer within 4 months of bottling and store in a cool place

The normal amount of priming sugar to add for bottle carbonation for different bottle sizes is as follows:

12 oz.	$\frac{3}{4}$ Teaspoon
16 oz.	1 Teaspoon
22 oz.	1 $\frac{1}{2}$ Teaspoons
1 liter/quart	2 $\frac{1}{2}$ Teaspoons
2 liter	1 $\frac{1}{2}$ Tablespoons