

# HOME BEERMAKING



# Home Beermaker

## INSTRUCTION GUIDE

### **BASIC KIT INCLUDES**

- 1 7.5 gallon Fermenter with Lid
- 2 Air lock w/ #2 Rubber Stopper
- 3 Double Lever Capper
- 4 Bottle Brush
- 5 Siphon
- 6 Instruction Booklet

### **COMPLETE KIT INCLUDES** (ADDITIONALLY)

- 1 Hydrometer
- 2 Bottle Caps
- 3 5 gallon Bottling Bucket w/ Spigot
- 4 Bottling Spigot

### **DELUXE KIT INCLUDES** (ADDITIONALLY)

- 1 5 gallon Glass Carboy
- 2 Bottle Caps

### **WHAT YOU'LL NEED**

- 1 Large Pot for boiling at least 2 gallons (Aluminum, Stainless Steel, or Enamel)
- 2 Long Handled Stirring Spoon
- 3 Ingredients\*

\*Our Ingredient kits offer a comprehensive selection of ingredients necessary to craft distinct beer styles, and are purchased separately. For a breakdown of the essential ingredients in a basic recipe, please refer to the following page.

## **BASIC BATCH OF BEER**

What you will need to brew 5 gallons of beer (approximately 48 bottles)

- 1 3.3 lb Malt Extract, Unhopped
- 2 1-2 lb Dry Malt and/or Corn Sugar\*
- 3 1 package of Yeast
- 4 2 oz Hop Pellets
- 5 3/4 cup Priming Sugar
- 6 5 gallons of Water

\*Using Dry Malt instead of Corn Sugar will produce a fuller bodied beer

## **STERILIZATION**

Thorough cleaning is a vital part of the brewing process as it eliminates microscopic bacteria, wild yeast, and molds that can potentially result in undesirable flavors in your beer. It is imperative to clean all equipment that comes into contact with your beer to ensure optimal quality. This includes your air lock & stopper, fermenter, hydrometer, siphon, spoon, etc.

**NEVER** use soap or detergent for cleaning equipment, this leaves a residue on your equipment that will ruin your batch of beer. The easiest way to do this is to fill a laundry tub with hot water and mix in the sterilizer solution provided in your kit. Allow all your equipment to soak in the solution. Rinse thoroughly.

## **PREPARING YEAST STARTER**

- 1 1/2 cup of Water or Malt Extract
- 2 1 teaspoon of Sugar (if only water is used above)
- 3 1 package of Yeast (will be enough for 5 gallon batch)

Ensure that the water or malt is warm, avoiding excessive heat as it can harm the yeast. If the temperature is too cool, the yeast will remain inactive throughout the fermentation process. Gently sprinkle the yeast on top of the water/malt without stirring. After approximately 10 minutes, the yeast should become foamy, indicating its vitality. If there is no activity in your starter solution, it may indicate a faulty yeast pack that will not work for your beer. Set aside your yeast starter until it is time to add it to your beer.



## **PURPOSE OF THE AIR LOCK**

The fermentation lock serves a crucial role during the fermentation process. Positioned atop the fermenter, its purpose is to safeguard your beer against air exposure. By partially filling the airlock with water and fitting it into the rubber stopper on the fermenter's lid, it permits the release of Carbon Dioxide (CO<sub>2</sub>) gas generated during fermentation, while effectively blocking the entry of Oxygen (O<sub>2</sub>).

## **USING YOUR HYDROMETER**

The hydrometer is an invaluable tool that ensures consistency in the brewing process, both during wort preparation and when bottling your beer at the optimal time. It plays a crucial role in measuring the available sugar content in malts, adjuncts, and grains when dissolved in a solution. Our Triple scale hydrometer is specifically designed to gauge sugar levels, with the Brix or balling scale indicating the percentage of sugar present. Additionally, the potential alcohol scale helps estimate the alcohol production. It's important to note that the hydrometer **does not** measure alcohol directly but aids in determining the potential output. You **must** take the initial reading of your wort **on the day of mixing**, typically using the Specific Gravity scale referenced in most recipes. The specific gravity of water at 60 degrees is 1.000, serving as the reference point for measurements. Temperature adjustments can be made following the instructions provided with your hydrometer.

## **FERMENTATION METHODS**

There are two different methods to brew your beer: using single stage fermentation or using secondary fermentation. The difference lies in the timing and vessel used during the fermentation process.

In single-stage fermentation, the primary fermentation takes place in a single vessel, typically a fermenter or carboy. The entire fermentation process, including the initial fermentation and conditioning, occurs in this vessel. Once the fermentation is complete, the beer is typically bottled or kegged for further aging and carbonation.

On the other hand, secondary fermentation involves transferring the beer from the primary fermenter to a separate vessel, often referred to as a secondary fermenter or carboy. This transfer is done after the initial fermentation is complete, and it allows the beer to undergo further clarification and conditioning. During secondary fermentation, any remaining sediment or suspended particles settle out, resulting in a clearer and smoother beer. Secondary fermentation is usually followed by a period of aging before the beer is bottled or kegged.

The decision to use either single-stage or secondary fermentation depends on various factors, including the beer style, desired clarity, and personal preference. While single-stage fermentation is simpler and requires fewer steps and equipment, secondary fermentation can contribute to improved clarity and flavor development in certain beer styles.



# Now it is time to start brewing!

## METHOD 1: USING SINGLE-STAGE FERMENTATION

- 1 In a large stainless steel or enamel pot, add 2 gallons of water, malt extract, corn sugar and/or dry malt. Stir thoroughly and then bring the mixture to a boil. Boil for 10 minutes. Turn off heat, add 1 oz of hop pellets. Set this aside.
- 2 Prepare your yeast starter (see previous page)
- 3 Bring the wort back to a slow boil. Boil for 10 minutes more. Turn off heat and add remaining hops and stir well.
- 4 Put 3 1/2 gallons of cold water into your sterilized fermenter. Add our cooked wort and stir well.
- 5 When the temperature of wort is below 78 degrees, you can add your yeast starter. (If your wort is too hot, it will kill the yeast, and if it is too cool then the yeast will remain dormant)
- 6 For the first 2 days, you can cover your fermenter with a clean cloth. This is during the rapid fermentation process and will eliminate the possibility of your air lock becoming plugged up.
- 7 On the 3rd day, you can place your lid on the fermenter with the air lock in place. Finish fermenting your beer for at least 10 to 14 days.
- 8 When no signs of fermentation are visible, you can take a hydrometer reading. The Specific Gravity should be 1.004 or less. This will determine that your beer is finished fermenting and it is safe to bottle.
- 9 Now you are ready to bottle your beer. Remove lid from fermenter and add 3/4 cup of priming sugar to the beer and stir well. Siphon the beer from the fermenter into the bottles. Fill to within 1" from the top. Place cap on the bottle and cap with the capper provided in the kit. Age for at least 10 days. Longer aging will usually improve the flavor of your beer.

## METHOD 2: USING SECONDARY FERMENTATION

- 1 Follow steps 1-5 in the previous single stage fermentation procedure.
- 2 Put a cover on your fermenter and attach the air lock. Fermentation will be vigorous for 2-3 days. Room temperature should be kept between 65-75 degrees Fahrenheit. This should be left to ferment for 4-5 days. This is the primary fermentation, which is aerobic using the oxygen in the wort.
- 3 When the vigorous fermentation is over (after 4-5 days), siphon the wort into a 5 gallon glass carboy. Attach your air lock. This is the secondary fermentation, which is anaerobic and the yeast consumes all the remaining sugars in the wort.
- 4 You will notice after 2 or 3 days in the carboy, your beer will start to clear. This is because all sugars are used up and yeast cells begin settling to the bottom of the carboy.
- 5 Usually after a good week (6-7 days) in the carboy, your beer is ready to bottle. Your specific gravity reading should be 1.004 or less before bottling. It will not hurt your beer if you leave it in the fermenter as long as needed to reach the correct specific gravity to insure that all fermentation has stopped.
- 6 When ready, siphon the wort back into the primary fermenter, leaving all sediment in the carboy behind. Add 3/4 cup of priming sugar and stir till dissolved.
- 7 Now you can bottle your beer as in step (9) of the previous instructions.