A COMPLETE GUIDE TO

BREW. BOTTLE. ENJOY!

5 GALLON BREWING

TURNING CRAFT BEER LOVERS INTO CRAFT BEER BREWERS SINCE 2010.

TABLE OF CONTENTS

INTRODUCTION TO CRAFT BEER

Craft brewing is a unique outlook on brewing that aims to formulate beer that is flavorful and distinctive rather than most beer on the market that aims to have mass appeal in order to sell the most product. This mass produced beer has cheap alternative ingredients such as rice or corn, which keep costs down but don't add to the flavor or complexity of the beer.

Craft beer is the complete opposite. Craft brewers strive to source quality ingredients from all over the world using only the purest and most flavorful blends of malted barley, hops, water and yeast. Craft beer can also get fairly extreme, whether it is a highly hopped India Pale Ale created by adding copious amounts of the world's most potent hops or a strong Belgian ale pushed to its alcohol limit by adding a few pounds of Belgian candi sugar. Craft beer can be an experiment in how far you can push the traditional limits of brewing to create a one of a kind beer that no one has ever experienced.

SO ENJOY THOSE UNIQUE FLAVORS YOU'LL EXPERIENCE WHEN TASTING YOUR FIRST BATCH OF FRESH HOME BREW AND REMEMBER THAT YOU HAD A HAND IN BEING PART OF ONE OF THE OLDEST TRADITIONS OF MAN BY CRAFTING YOUR OWN BEER!

BEER INGREDIENTS

GRAINS
(Fermentation, Flavor)

Malted barley is the primary source of fermentable sugars in brewing. When the yeast is added to the wort (unfermented beer – pronounced "wert") they will convert these sugars to alcohol. In our kits we use quality malted barley extract that is 100% natural with no additives. Using malt extract has some advantages over brewing with all grain, the biggest being time and convenience. The all-grain brewing process generally takes 3+ hours, while extract brewing takes about 90 minutes without compromising quality or taste. We also incorporate a variety of specialty grains into our kits which add to the complexity and color of the beer.

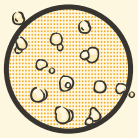
HOPS
(Bitterness, Flavor, Aroma)

Hops are used to balance the flavors in beer. Without hops, beer would be sweet, yet the bitter acids and oils in the hops help to balance the flavor profile and add aroma. Hops are grown all around the world and come in many varieties, each having their own distinct characteristics. Hops also have the benefit of acting as a natural preservative; one of the most famous examples of this is seen in the India Pale Ale, or IPA-style of beer. The preservative qualities of hops originally helped this highly hopped beer survive the long voyage from Britain to India and thus the popular IPA-style was born.

BEER INGREDIENTS

WATER
(H_2O)

Water is the main ingredient in beer and any imperfections in the water will come through in the finished product. Generally, if your water is safe to drink and tastes fine then it will be okay for brewing. If you're not sure about the quality of your water or just want the best possible beer, it is recommended to run the water through a filter (like a Brita® filter) or buy spring water to use in your beer.



YEAST
(Fermentation, Flavor, Carbonation)

Yeast is a living organism that is technically a fungus. It grows and multiplies by eating the sugar (malt), converting the sugar to alcohol and then releasing CO2 (yeast will eventually help to carbonate your beer). Different strains of yeast give different flavors to your beer. Some yeast produce fruity flavors while others may create a spicy character during fermentation. Different strains of yeast also have different tolerances to the alcohol levels they create. Eventually, the yeast will become inactive in higher alcohol levels, which slows and ultimately stops fermentation. This is why there are no beers as strong as spirits. The strongest a beer can get naturally is just over 20% Alcohol By Volume, which is not easily achieved.

WHAT'S IN THE BOX

If you've recently acquired The Everyday 5 Gallon Beer Brewing Kit from us, you can expect to find the following items in your package.

FERMENTATION EQUIPMENT:

Ⓐ 6.5 Gallon Fermentation Bucket with Spigot & Lid

Ⓑ 3-Piece Airlock

BOTTLING EQUIPMENT:

Ⓒ 6.5 Gallon Bottling Bucket with Spigot

Ⓓ Transfer Tubing

Ⓔ Spring Tip Bottling Wand

Ⓕ Capper & 50 Bottle Caps

ADDITIONAL BREWING EQUIPMENT:

Ⓖ Thermometer

Ⓗ Fermometer (adhesive thermometer)

Ⓘ Hydrometer

Ⓙ **5 GALLON BEER RECIPE KIT:**

- Specialty Grains + Grain Steeping Bag
- Dry Malt Extract
- Hops
- Sanitizer Packet
- Yeast

Some recipes might include additional ingredients.

RECOMMENDED EQUIPMENT (NOT IN THE BOX)

- Large brew pot with a lid (3-6 gallon capacity)*
- Ice (20 pounds)
- Fifty (50) "pry off" beer bottles*
- ⅔ cup white table sugar or pre-measured priming sugar packet*

*These items can be found on CraftaBrew.com

BREWING INSTRUCTIONS

This is a general guide to brewing with Craft a Brew's recipe kits. Not all brewing processes are the same for every beer, so if your kit came with additional instructions make sure to follow them.

1. Depending on your pot size, pour at least 2.5 gallons or as close to 5 gallons of water as you can into your pot. Be sure to leave at least 6 inches of room at the top to make room for the ingredients. Don't worry, you can always add more water to the fermenter to reach a full 5 gallon volume after brewing. Place your pot on the burner and turn up to high.

2. Place your specialty grains in the grain bag and tie off the top. Wait until your pot of water reaches 155°F and then steep the grains in the water for 20 minutes while closely maintaining the temperature.

3. Remove and discard the grains making sure NOT to squeeze the excess water from the grains – doing so will release unwanted tannins. Next, bring your wort (unfermented beer) up to a boil. Once you see the first boiling bubble turn off the burner.

4. Next, take out your dry malt extract and slowly stir it into the pot, making sure it does not clump or stick to the bottom. Once all of the malt extract is completely dissolved, turn the heat up to high.

5. At this point you should be monitoring your brew pot at all times because the wort can easily boil over and this can be a very messy mistake! If you start to have a boil over, turn off the heat and wait for the foam to subside. Bring the wort up to a slow rolling boil. Once this is achieved, stir in your bittering hops and start timing for a 60-minute boil. If your kit includes additional hops add them as directed on each packet.

6. After the 60 minute boil, turn off the burner and remove the pot from heat. Next, create an ice bath in your sink using 20 pounds of ice and cool water then place your brew pot in the ice bath. This is done to cool the wort to prepare it for the yeast, which must be added below 75°F. Place a lid on the pot while cooling to prevent contamination. You may need to replace the ice as it melts to get the temperature down. Stirring periodically with a sanitized spoon will shorten cooling time.

SANITATION

Proper sanitation is regarded as the most important step in homebrewing. It is the difference between great tasting beer and beer so bad you'll have to pour it down the drain. Yeast is the only organism you want touching your beer, any other bacteria will eat the sugar and spread quickly making the beer sour and undrinkable. So make sure everything that touches your beer after it is brewed is properly sanitized.

BUCKET ASSEMBLY:

If this is your first time using the buckets, you'll need to assemble them prior to sanitizing. First, remove the plastic nut and one of the silicone gaskets from the spigot. With one gasket on the spigot threads, slowly twist the spigot into the bucket's hole. Then, place the other gasket on the spigot inside the bucket, followed by the plastic nut. Twist to tighten the gasket so it presses the pair gaskets against the inside and outside the bucket, forming a tight seal. Do not over-tighten. We recommend filling the bucket with tap water – just above the 1 gallon fill line – to check for any leaks before you proceed. Adjust the spigot & washers as needed.

With the fermentation bucket's spigot in the closed position, pour HALF of the sanitizer packet's contents into your fermentation bucket and top with 1 gallon of water. Reserve the remaining HALF of the sanitizer for bottling day. Stir to dissolve. Add the airlock, thermometer and a large spoon to the sanitizing solution and let soak for 60 seconds. Retrieve the components and let dry on clean paper towels. Next, install the lid on the bucket. Cover the lid's hole with your thumb and rock back & forth to splash sanitizer around the container. This may cause some leaks, so is best done over the sink or outdoors. Open the spigot to allow sanitizer to flow through it and empty into your sink. Remove the lid & discard any remaining sanitizer.

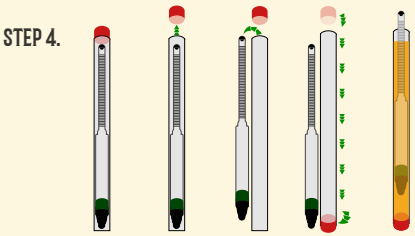
FERMENTATION

1. Verify that the wort is below 75 F with the sanitized thermometer before proceeding to fermentation.

2. Confirm that the spigot on your sanitized fermentation bucket is closed. Then, very carefully pour the chilled wort from the brew kettle into the bucket. Try to leave as much of the thick sludge behind in the pot as possible.

3. Add cool water as needed to reach the 5 gallon fill line. Gently stir with a sanitized spoon to incorporate.

4. Now, you'll take the OG reading (Original Gravity). First, remove the hydrometer, paper & foam from the plastic tube. Place the hydrometer back in the empty plastic tube. Using the spigot, completely fill the tube with wort. Gently spin the hydrometer to remove any bubbles that might be clinging to it. Set the tube on a flat surface and note the hash mark on the hydrometer that lines up with the surface of the liquid. Write this number down – you'll use this OG to calculate the ABV later. DISCARD THIS SAMPLE. DO NOT **pour it** back into the fermenter.



5. Cut open your included packet of yeast and sprinkle this across the surface of the wort.

6. Install the lid. It helps to move clockwise around the lid to secure. Place the airlock in the lid's hole. Remove the airlock's vented cap and fill the body with water to reach the fill line. Place the vented cap back on.

7. Stick the fermometer (adhesive thermometer) to the outside of the fermentation bucket. For the most accurate readings, place it near the middle of the wort's depth so the entire strip is "touching" the beer from the outside of the bucket. Look for the greenest temperature

BOTTLING

1. Rinse bottles with warm water to remove any sediment or dust.

2. Next, you will sanitize your bottling day equipment. Pour the remaining sanitizer into your **EMPTY** bottling bucket. Make sure the spigot is in the closed position, then top with 1 gallon of water. Stir to dissolve. Add the capper, caps, transfer tubing, bottling wand and a large spoon to the sanitizing solution and let soak for 60 seconds. Retrieve these items and let dry on clean paper towels. Then, working in batches, submerge and soak bottles for 60 seconds each. Let drip dry on paper towels. Lastly, swirl the sanitizing solution around inside the bucket to sanitize the interior. Open the spigot over the sink to allow sanitizer to flow through it & discard the remaining solution in the sink.

3. In a small sauce pot add 2 cups of water and exactly ⅔ cup of white table sugar. The sugar will give the residual yeast in the beer the fuel they need to carbonate the beer. Heat the pot of water on medium-high and stir in the sugar until fully dissolved. Boil for 5 minutes then cover and let cool completely. This is your "priming sugar" solution.

4. While your priming sugar cools, take your FG reading (Final Gravity). Place the hydrometer in its empty plastic tube. Using the spigot on your fermenter, completely fill the tube with beer. Gently spin the hydrometer to remove any bubbles that might be clinging to it. Set the tube on a flat surface and note the hash mark on the hydrometer that lines up with the surface of the liquid. **DISCARD THIS SAMPLE. DO NOT** pour it back into the fermenter.

5. Confirm that the spigot on your sanitized bottling bucket is closed. Once priming sugar is completely cool, pour it into the bottling bucket.

CALCULATING ABV

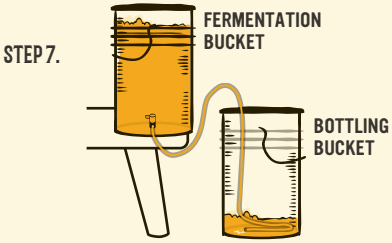
Now that you have your OG & FG, you can calculate your beer's final Alcohol By Volume (ABV).

(OG – FG) * 131.25 = ABV

EX. **(1.055 – 1.013) * 131.25 = 5.5% ABV**

6. Place the fermentation bucket on a chair or surface that's slightly elevated above the bottling bucket. Attach the sanitized transfer tubing to the fermenter's closed spigot, placing the opposite end of the transfer tubing at the bottom of the bottling bucket. The tubing's opening should be as submerged as possible in the priming sugar to reduce splashing and air bubbles during the transfer (which can oxidize the beer).

7. Gently open the spigot to start the flow of beer from the fermenter to the bottling bucket. This transfer helps mix the priming sugar with your beer without oxidizing.



8. After the beer is completely transferred into the bottling bucket, stir GENTLY with the sanitized spoon to distribute the priming sugar. There will be sediment and some beer left in the fermenter – do not pour this into the bottling bucket. Rinse and discard this sediment. Remove the transfer tubing from the fermenter and place on clean paper towels – you're about to use it again.

9. Now, place your bottling bucket (filled with beer & priming sugar) on a chair or surface that's slightly elevated above your bottles. Attach the transfer tubing to the bottling bucket's spigot. Attach the sanitized bottling wand to the opposite end of the tubing. The spring tip of the bottling wand will need to touch the very bottom of each bottle.

BOTTLING WAND TIPS

A spring tip bottling wand is a handy tool that allows you to bottle with less mess! You'll use the wand to start and stop the flow of beer when bottling – NOT the spigot. You'll only open the spigot once and you'll use the wand to start and stop the flow.

Press the tip against the bottom of a bottle to allow liquid to flow freely. Lift up the wand when the bottle is full to activate the automatic shut off valve.

Let beer fill each bottle to just below the lip. When you remove the wand, you'll be left with the perfect amount of headspace!

10. Gently rest the bottling wand inside your first empty bottle. Carefully open the spigot. Then, press the bottling wand down into the bottle to release the flow of liquid. Once the bottle is filled to the top, lift the wand up to stop the flow.

11. Repeat this process to fill all of your bottles with beer. You may need to tilt the bucket to maintain flow while bottling the last gallon of liquid.

CAPPING TIPS

For more leverage and ease, you can place bottles on a low countertop or bench so you can put your weight into it from above. You can also place each bottle on the floor, securing between your feet when capping, for even more leverage.

Push the arms of the capper down until they are parallel with your surface. Do not excessive force, otherwise you can break the bottle necks. To help absorb shock, place a towel underneath bottles when capping.

12. Use the capper to cap each bottle. Press down the handles to clamp the cap into place.

13. Store your bottles for 2 weeks at the recommended fermentation temperature for your recipe. Usually between 65–75°F of direct sunlight to preserve the volatile hop compounds. After 2 weeks at room temperature, move the bottles to the refrigerator to slow down the yeast and lock in the carbonation. If you do not have enough room in your fridge, place the extras in the next coolest spot in your home (like a chilly basement). If left at room temp, the yeast can continue to create pressure inside the bottles, which can lead to dangerous "bottle bombs."

AGING & CARBONATION TIPS

Some beers will benefit from some extra aging in bottles to mellow the flavor or soften any harsh off-flavors. If there are any noticeable "off flavors" present when tasting your first bottle then it is a good idea to let the beer age for another 1–2 weeks at room temperature.

If your beer is under-carbonated, this can be fixed! The beer just needs more time & possibly a warmer location. You can remove bottles from the fridge and let them continue carbonating at room temperature for another ~3–5 days before testing another bottle.

Cheers!

SCAN FOR HOW-TO VIDEOS, FAQS & MORE:

OR VIST CRAFTABREW.COM/BEERFAQ

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