

A
NO-NONSENSE
GUIDE TO
BREWING
YOUR OWN
BEER





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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 out 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 worlds most potent hops or a strong Belgian ale pushed to it's alcohol limit by adding a few pounds of Belgian candy 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 creation that no one has ever experienced.

So enjoy those unique flavors you'll experience when tasting your first batch of fresh homebrew and remember that you had a hand in being part of one of the oldest traditions of man by crafting your own beer!



INGREDIENTS:

MALTED BARLEY

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 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 Indian 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.



WATER

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

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 die in the presence of alcohol and this will slow and eventually stop 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.



EQUIPMENT

- A 1 gallon glass carboy (fermentor)
- B Air lock
- C Drilled rubber stopper
- D Transfer tubing
- E Racking cane
- F Thermometer
- G Funnel
- H Tube Clamp

RECOMMENDED EQUIPMENT:

- Fine mesh strainer
- Large brew pot
- Ice (10 pounds)
- Swing top bottles (10) or "Pry off" bottles and our capping kit





BAG CONTENTS

- A Malt Extract
- 3 Specialty Grains
- C Hops
- D Yeast
- Sanitizer
- F Grain Bag

SANITATION

Proper sanitation is regarded as the most important step to brewing. 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 and rinsed off before using. A good way to keep things sanitized during brewing is to mix in half of your packet of sanitizer with about a gallon of water and place this mix into a bucket or pitcher. Next, sanitize your equipment by soaking the components for 60 seconds in the mix. Place the equipment on fresh paper towels.

HOW TO BREW

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

- Pour as close to a gallon of water in your pot as you can, but leave at least a
 few inches of room to prevent boil overs. Don't worry, you can always add more
 water to get to the 1-gallon mark (indicated by the "one gallon" on the
 fermenter) after brewing. Place your pot on the burner and turn up to high.
- 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 15 minutes while closely maintaining the temperature.
- Remove and discard the grains making sure NOT to squeeze the excess water from the grains (this will release unwanted tannins). Next, bring your wort (unfermented beer) up to a boil. Once you see the first boiling bubble take your brew pot off the burner.
- 4. Next, take out your 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 return the pot to the burner and turn the heat up to medium-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 blow on the foam (this will decrease the foam). 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 flavoring hops add them at 15 minutes left in the boil, and aroma hops should be added with 2 minutes left in the boil.
- 7. After the 60 minute boil, shut off your stove and take the brew pot off the burner. Next, create an ice bath in your sink using a few 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 top on the pot while cooling to prevent contamination. The quicker you cool it down, the less chance of a contamination, so use a lot of ice if possible.
- 8. At this time you should sanitize your glass carboy, rubber stopper, thermometer, tubing, strainer and funnel. Mix half of the sanitizer packet (save the rest for bottling) in a bucket or large pitcher with 1 gallon of warm water and mix throughly. Sanitize your equipment by letting it soak for 60 seconds in the solution. Place on fresh paper towels.
- 9. Verify that the wort is below 75° F with the sanitized thermometer. Take out your sanitized carboy and funnel, and then transfer the wort into the carboy. If you have a fine mesh strainer, pour the wort through this in order to separate the spent hops from the wort.
- Add cool water if needed to about an inch below the "one gallon" fill line. Cut open your included packet of yeast and add the contents to your full carboy.
- 11. Take your sanitized rubber stopper and plug up the top. Now you need to make sure the yeast has oxygen to multiply so you will need to aerate the wort. Take your clean thumb and place it over the top of the rubber stopper hole. Shake the carboy vigorously for over a minute.

- 12. Now we need to make a blow off assembly to ensure the beer foam does not overflow when fermenting. Place the end of the <u>flexible tubing</u> about a 1/2 inch into the hole of the rubber stopper and the other end into the bottom of a half full glass of water. Fermentation should begin within 24–48 hours and you will start to see bubbles of CO2. In a few days when fermentation calms, fill your air lock half way with water and insert into the stopper.
- 13. Expect to see a lot of fermentation activity between 12–72 hours after adding the yeast. This will then will slow dramatically for the remainder of the two weeks. Let your beer ferment for 2 weeks in a cool (60–75° F), dark place.

BOTTLING

We recommend using swing top bottles, the same ones that Grolsch® beer is bottled in. You can sometimes ask for extras at a bar or just go buy two six-packs, empty (drink), and then use those. Another option is saving "pry off" bottles and buy our capping kit. Try practicing siphoning with just water before you bottle to ensure no beer is accidentally spilled. Having a friend to help bottle your beer will make the job much easier.

- 1. Rinse bottles with warm water insuring there is no sediment at the bottom.
- Next you will sanitize your bottles, racking cane, tubing and a spoon for mixing.
 Mix the rest of your sanitizer in a bucket or large pitcher with 1 gallon of warm
 water. Soak all of the bottles and components in the solution for 60 seconds
 each to sanitize. Place everything on a fresh sheet of paper towels.
- 3. In a large pot (over a gallon) add about 1 and a half cups of water and exactly two tablespoons of table sugar. The sugar will give the remaining yeast food to carbonate your beer once bottled. Heat on medium-high and stir in the sugar until fully dissolved. Boil for 5 minutes then cover and let cool.
- Once the pot and sugar water are completely cool it is now time to siphon the beer from your glass fermentor into your pot (this transfer is to ensure the sugar properly mixes with your beer).

To do this, get a bowl of fresh, clean water; dunk your tubing into the water (with clamp open) and let the tubing completely fill with liquid. Next close the tubing clamp and attach the non-clamped end to the racking cane, this will be your siphon starter. **See Page 9**

- 5. Insert the racking cane into the fermenter making sure the end is far enough away from the sediment at the bottom so as not to suck it up. Place the clamped end as low as you can and unclamp. This will start the flow of beer into your tubing. Use a glass to catch the water and clamp the tubing once the beer starts to freely flow out the end.
- Transfer all of the beer into your pot with the sugar water. Mix gently and thoroughly with a sanitized spoon.
- Next, repeat steps 4-5 in order to start a siphon into the bottles. Fill the bottles slightly higher than where the neck starts, cap and repeat.
- 8. Store the bottles in a warm dark place for two weeks to let the beer condition and carbonate.
- 9. Refrigerate, drink and enjoy!

*Some beers will benefit from some extra aging. If there are any noticeable "off flavors" present then it is a good idea to let the beer age for another 1–2 weeks.

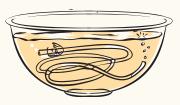
If you run into problems or have any questions for our brewmaster, please visit our website at CraftaBrew.com and use the "contact us" page, we would be glad to help!

Cheers!

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STARTING A SIPHON

GUIDE to Craft Brewing



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Next, close the tubing clamp...



...and attach the non-clamped end to the racking cane; this will be your siphon starter.

Insert the racking cane into the fermenter making sure the end is far enough away from the sediment at the bottom so as not to suck it up.





Place the clamped end of the tubing as low as possible and unclamp.

