

# I'm Interested In Making Beer, But How Do I Do It?

Here is a checklist of everything you will need to make your first batch of beer at home:



A quality brew kettle



One Brewing Equipment kit



Dial Thermometer



A brewing recipe kit



A sanitizer, such as <mark>Easy Clean</mark>





2 cases + a six pack of empty, OR A kegging system returnable-type bottles

**Note about Equipment:** Keep in mind that many aspiring brewers may already own some of this equipment. If you have a stainless steel or enameled kettle that holds at least 3-4 gallons, it can be used as a brew kettle. Midwest **does not** suggest using an aluminum kettle, as it may have adverse effects on your beer. The equipment kit pictured above is our Intermediate Brewing Equiment Kit, which is the kit that most of our customers purchase when they get started in the hobby. If you're not sure that you'll enjoy the hobby but just want to see how a batch turns out, take a look at our Brewing Basics Equipment Kit. This will give you the bare minimum equipment you need to brew beer at home.

I'm interested in making beer, but how do I do it? That is a very good question, and we'll give you the rundown on the process. This PDF is just for the beginner brewer looking to get started in this great and rewarding hobby. We are going to run you through the basic brewing process, and give you a few hints as well. You will want to watch our video, and read your particular kit instructions as well because each style of beer will have its own combination of ingredients that we can't account for here. Not to worry, the kit instructions will tell you specifically what hops to add and for how long, how long to boil, and what grains are in your kit. Here is what you need to know to make the perfect beer:

## **Before You Begin**

- 1. Check to make sure you have all of the equipment and ingredients that you need. There is nothing worse than starting a batch of beer, only to find out that the spoon you use has gone missing.
- 2. Pour yourself a good microbrew or a mug from a previous batch of your own beer. This is almost a requirement when making your own beer.

## **Cleaning and Sanitizing**

3. OK, now you want to clean and sanitize anything that is going to come in contact with the beer. This includes spoons, fermenting equipment, hydrometer, etc. Midwest recommends using a product like Easy Clean, One Step, B-Brite, or IO Star for you cleaning and sanitation needs. For more information on cleaning and sanitizing, click here. Now that you have all of your equipment ready, let's get brewing!

#### Brewing

- 5. Take your grains and place them in the muslin bag (if your kit comes with grains). Tie the top of the muslin bag so your grains don't go floating all over the place in your brew kettle.
- 7. At this point you want to fill your brew kettle with water. You want at least 1 gallon of head space in your kettle to help prevent boil over. Or, at least allow you enough time to turn the heat down. Water is the great debate in brewing. We won't go into all the details, but just know that what goes into your beer affects the overall quality of your beer. So if you have water with an odor, then you will end up with a beer with an odor. Most brewers use store bought spring water, but feel free to use what you want.



- 8. With the water in the brew kettle and your grain bag in the water, start heating it up. You do not want a boil! You want your water to be 152° F. A Dial Thermometer comes in handy for this step. Yes, you can be off by a few degrees here, but the closer to 152° F the better. Why 152° F you ask? Again, good question. Steeped grains will not add many fermentables to your beer (i.e. your original gravity will not increase much). Steeping grains, unlike mashing, does not convert the complex starches in the sugar into fermentable sugars, so only a small percentage of the steeped grain (<10%) will ferment. However, since unfermentable proteins are added by steeping, the body of the beer will be increased with the use of specialty grains. Why would I want a sweet beer you ask? Sugar is what the yeast eats to create alcohol. So, more sugar = more alcohol. It really is as simple as that. But, beware; more sugar/alcohol does not always make a good beer.</p>
- 9. You want to "steep" the grains (just like making tea) for 30-45 minutes. Some recipes may have you do this longer, but most call for about a ½ hour. Feel free to stir the grains if you like.
- 10. Once the ½ hour is up, you are ready to add the malt extract. **IMPORTANT NOTE: You want to remove your kettle from the burner for this part.** Liquid malt is very thick and will sink to the bottom of the kettle. If your kettle is sitting on the burner at this time, it is very easy to scorch the malt. This leads to a burnt flavor in your beer that most brewers try to avoid. Leave the burnt flavors to your grains, not the malt extract.
- 11. While you are adding the malt extract, stir it in well. Try to make sure you have it dissolved as well as possible before returning the kettle back to the burner. Once you feel the malt is stirred in well, place the kettle on the burner, and crank up the heat! You now want to bring all the liquid, or wort, up to a boil.

# **Hop Additions**



- 12. Once you see the first bubble of a boil, you are ready to add your first addition of hops. These hops are called your bittering hops. The longer the hops boil, the more flavor, or bitterness, will be present in your beer. Check the directions for your beer on what hops are your bittering hops. Each style of beer will vary on the bittering hops. Some beer styles will use the same hops for bittering as well as the aroma hops, which we will talk about in a bit.
- 13. It is very common for the bittering hops to be boiled for 60 minutes. But, you might want to play with timeframe as you make more beers. If you boil the hops longer, you will get a bitterer flavor. If you boil shorter, a less bitter flavor.
- 14. Depending on what kit you bought or the style of beer that you're making, the recipe may or may not call for a flavor hop addition. Just like it sounds, these are the hops that impart flavor to your beer. These are usually boiled for 30-40 minutes. Check your recipe or kit instructions for more details.

- 15. Let the wort boil, and just before you are ready to turn off the heat you are going to add your aroma hops. The aroma hops are added for just that, aroma. You are not going to get a lot of actual bitterness, but you will get the smell of the hops in your beer. Seeing that 75% of taste is from smell, this gives the impression of bitterness in your beer. Most recipes call for the addition of your aroma hops with 5 minutes left of the boil.
- 16. Once you are done boiling, you want to cool off the beer as quickly as possible. You can do this by using a wort chiller, cold water, or ice. If you don't have a wort chiller, do not panic. Use ice instead. Here's a little hint on how to cool the wort off quickly. Fill your sink with cold water and add the kettle to the cold water. When the water in the sink is hot, drain it out, and fill the sink again. Repeat this process. On the third time, add a ½ bag of ice either to your kettle or to the sink. Most ice is now filtered and rarely adds a flavor to the beer. But, if you are trying to be careful, then add it to the sink instead. This should be enough to drop the temperature below 80 degrees. You want to be below 80° F before you add your yeast because warmer temps can damage or even kill your yeast. When you are below 80° F, add your cooled wort to your fermenter.



**Immersion Wort Chiller** 

17. You may need to top off your wort with water depending on how large your brew kettle is. Keep in mind that all Midwest Supplies Ingredient Kits make 5 GALLONS. Make sure you do not top off to more than 5.5 gallons (to allow for fermentation waste) of water in your fermenter because you are just watering down the beer. Isn't the point of homebrewing to get away from watered down, tasteless beer?



- 18. When you have 5 gallons in your fermenter, you are ready to add your yeast. Follow the directions on your yeast packet on how to prepare and use your yeast.
- 19. Place the lid or stopper on your fermenter and add your airlock. You want the airlock to be filled halfway with water, sanitized water, or vodka. The airlock will allow the CO<sup>2</sup> to escape, but prevents air from coming into contact with the beer.
- 20. Allow the beer to ferment. Within 12-24 hours, you will begin to see bubbles coming out of the airlock. This is a good sign, the yeast is doing its job! The yeast eats the sugar and gives off alcohol and CO<sup>2</sup>. The CO<sup>2</sup> is what is escarping from the airlock, making the bubbles

come up. Depending on the yeast you selected and the style you brewed, this process (initial fermentation) may take anywhere from a few days for lower gravity beers to a few weeks for high gravity brews. When you are seeing a bubble a minute or less coming out of the airlock, it's done. From here you can rack the beer to a carboy for secondary fermentation (optional but highly recommended), or you can bottle or keg it.

#### More information:

"What is Two-Stage Fermentation and How Do I Do It?" PDF

"How Do You Bottle A Beer?" PDF