



Required Equipment

- Mashing Equipment
- Boil Kettle
- Fermenting Vessel
- Thermometer
- Hydrometer
- Airlock / Blowoff Tube
- Timer
- Bottling Equipment (if applies)
 - 48 Bottles & caps
 - Bottle Capper
 - Bottling Bucket
 - Bottle Filler
 - Priming Sugar
- Kegging Equipment (if applies)

Kit Ingredients

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Monster Brew All Grain Kit Instructions

Batch size: 5 gallons

OG: FG: ABV:



MAKING A YEAST STARTER

Optional: Complete 1 to 2 days before brewing.

📌 **FYI:** Though not required, we suggest making a yeast starter because it benefits the fermentation process by reactivating yeast and increasing the cell count.

1. Add 3/4 cups of dry malt extract to 4 cups of water in a small pot.
2. Heat slowly and boil for 10 minutes.
3. Cool to room temperature.
4. Pour into sterile container and add yeast. Cover container with foil and set aside at room temperature.

PT.1 BREWING THE BEER

IMPORTANT: Check the top of page 2 for any special instructions before you begin!

1. HOT LIQUOR WATER

- Heat 6-10 gallons water to approximately 165F.

2. MASHING

📌 **FYI:** Mashing is the processing of mixing & steeping malted barley with hot water to make the wort.

- Use this mash schedule:

- Add grains to the mash tun.
- Transfer approximately 4-6 gallons of the heated hot liquor water the mash tun.

📌 **Pro-Brewer Tip:**

Aim for a water/grist ratio of 1.5qt/lb for best extraction.

- Stir well to evenly distribute grain and water. Break up any dry dough balls that may form.
- Mash according to the schedule above, adding or removing heat to maintain the target mash temperature for that step.

📌 **Pro-Brewer Tip:**

You can add a small amount of cold or hot water to the initial mash to meet the target temperature.

3. LAUTER & SPARGING

📌 **FYI:** Lautering & Sparging is the process of separating the wort from grain and then rinsing that spent grain to collect residual sugars.

- **Drain wort from the mash into the boil kettle.**
- Add 1 1/2 - 2 gallons of water heated to 170 & mix gently.

- Drain to boil kettle & repeat sparge with another 1 1/2 - 2 gallons.

📌 **Pro-Brewer Tip:**

You should now have approx 6-7 gallons in the boil kettle. If not, continue rinsing as necessary to obtain about that volume.

4. BOILING

📌 **FYI:** Boiling has two purposes:

the first is to sterilize the wort and ready it for the yeast, and the second is to extract hop oils, which give beer its aroma and bitterness, and help prevent spoilage.

- Carefully begin heating to achieve a steady boil. Be careful when reaching a boil initially - the wort will foam!

- Observe closely & remove heat as needed to avoid a boil over!

📌 **FYI:** Hops boiled for a short period of time impart more aroma and less bittering. Hops boiled for a longer amount of time lose their aroma and add bittering and flavor.

- Once you achieve a steady boil, set a timer for 60 minutes and according to the time remaining, add hops using this schedule:

- **TURN HEAT OFF.**

5. COOLING

- From this point forward, sanitation is imperative! Any instruments or utensils coming in contact with the wort should be well sanitized.

- Using an immersion chiller, plate chiller, ice bath, or other method, cool the wort as quickly as possible below 85F.

- Take the Specific Gravity Reading.

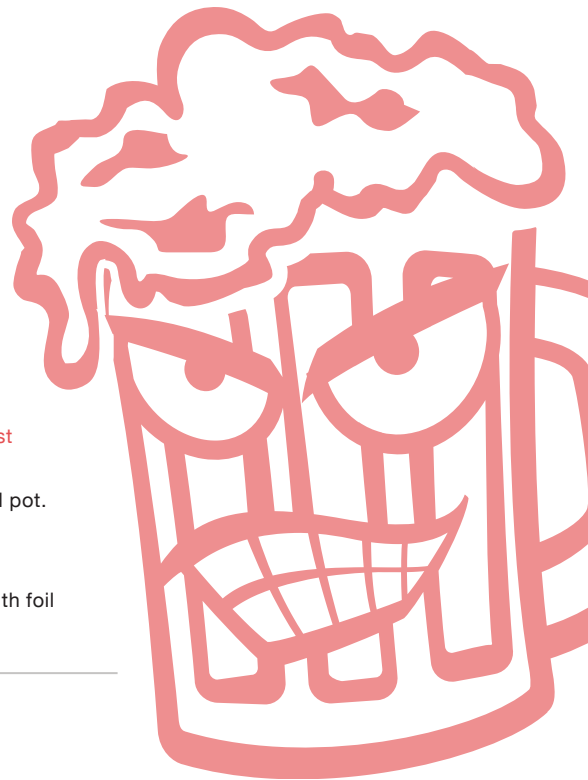
- Prepare yeast if necessary, and add to a sanitized fermenter.

- Transfer the cooled wort from the boil kettle to the fermenter, and seal with the sanitized lid or stopper.

📌 **Pro-Brewer Tip:**

Consider a blow-off tubing instead of an airlock to avoid clogging during initial vigorous fermentation.

- Set the fermenter aside in a cool (68-74F), dark environment for fermentation.



FLIP OVER
→



PT.2 FERMENTING THE BEER

Fermentation is the process of live yeast consuming simple sugars and producing ethanol (alcohol) and CO2 (carbon dioxide). This CO2 bubbles out of the fermenter as a gas, the ethanol remains dissolved in the beer as alcohol.

1. Fermentation will typically begin within 48 hours.

🍷 Pro-Brewer Tip:

Serenading, hugging, and comforting your beer only aids in better fermentation. Cherish your creation.

2. Allow beer to ferment and condition for 10 days or until visible fermentation ceases, whichever is longer.

🍷 Pro-Brewer Tip:

Now is the time to take the temperature and hydrometer reading for the Final Gravity (the target FG is listed at the top of the first page). Record both of these numbers somewhere safe. Use the chart to the right to calculate the corrected OG and the FG at 60°F.

3. For best results, we recommend allowing another 1 to 2 weeks for conditioning.

🍷 FYI: A conditioning period after the initial fermentation helps the beer to mature & yeast to clean up lingering byproducts from fermentation. Though not necessary, nearly all beers benefit from 1 to 2 additional weeks of conditioning after the initial fermentation ends. Beers can typically sit in the fermenter at least 4 weeks without any issues before moving on to bottling or kegging.

🍷 Pro-Brewer Tip:

Recording the gravity of a beer is the only certain way to know when fermentation is complete. A hydrometer reads how much sugar is dissolved in a solution. Taking the gravity before and after fermentation will tell you how much sugar was consumed by the yeast, and through calculations, how much alcohol is in the beer. Once the yeast finish fermenting, they enter hibernation, flocculate (stick together forming clumps), and settle along the bottom of the fermenter. The beer is now ready for carbonation.

GRAVITY TEMPERATURE CORRECTION

Use the chart below to find the change in Gravity for a sample at a temperature other than 60°F. Then add the corresponding ΔG to your recorded Gravity for the corrected value.

Example: If the Gravity of a sample is 1.041 at 83°F, then the ΔG is 0.003, and the corrected Gravity is 1.044.

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times 5/9 \quad ^{\circ}\text{F} = (^{\circ}\text{C} \times 9/5) + 32$$

°C	°F	Delta G (ΔG)
15.6	60	0.0
18.3	65	0.001
21.1	70	0.001
23.9	75	0.002
26.7	80	0.002
29.4	85	0.003
32.2	90	0.004
35.0	95	0.005
37.8	100	0.006
40.6	105	0.007
43.3	110	0.008
46.1	115	0.009

PT.3a BOTTLING THE BEER

Carbonation traditionally takes place inside the bottle. When ready for bottling, a small amount of sugar (known as priming sugar) is added back into the beer. This sugar will be consumed by the remaining yeast. This time, since the bottle is capped, the CO2 produced by fermentation will pressurize the bottle and carbonate the beer.

1. Sanitize any equipment that will touch the beer & the bottles.
2. Heat 1 cup of water to a boil.
3. Add 1 package (about 4-5oz. or 3/4 cup) of priming sugar & dissolve.
4. Add the sugar syrup to the sanitized bottling bucket.
5. Using a siphon, rack (transfer) the beer to the bottling bucket. Attempt to leave as much of the settled yeast as possible in the fermenter.
6. Attach the bottle filler to the bucket.
7. Fill each bottle and then cap. There should be 1-2 inches of air remaining.
8. Store the bottles in a dark cool (68-74°F) space for a minimum of 2 weeks.

🍷 FYI: During this bottle conditioning time, since fermentation is taking place, you again will want to keep bottles at room temperature so the yeast does not enter hibernation. If you open a bottle and find it under carbonated, it typically needs more time or warmer temperatures to complete it's conditioning.

9. After this time, bottles can be stored in a cool or cold place while waiting to be served.

CHEERS!

PT.3b KEGGING THE BEER

If you choose to keg the beer instead of bottling it, there are two methods:

- **Natural Carbonation** uses sugar and yeast.
- **Force Carbonation** uses CO2 at high pressures and low temperature.

NATURAL CARBONATION

1. Transfer beer over to a sanitized keg.
2. Dissolve priming sugar in a cup of boiling water and add to the keg. Seal tightly, and place in a cool (68-74°F) environment. Allow 2 weeks for carbonating, then connect CO2 and set regulator around 12 PSI for serving.

🍷 Pro-Brewer Tip:

The first pour of naturally carbonated keg will contain some yeast and other sediments. The remainder of the keg should begin to pour clear.

FORCE CARBONATION

1. Transfer beer over to a sanitized keg.
2. Attach CO2, pressurize to 25-30 PSI, and cool to serving temperatures (32-45°F). After 36 hours, reduce the regulator to serving pressure around 12 PSI and allow 3 more days for carbonating, then serve.