

Required Equipment

- · Boil Kettle
- · Fermenting Vessel
- Thermometer
- Hydrometer
- ·Ice
- · 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

MonsterBrew.com 1-800-454-0274 support@monsterbrew.com



Monster Brew Extract 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.
- 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. PREPARING THE EXTRACT

- Remove labels from can(s) of liquid malt extract
- Place can(s) in a large pot, bowl, or sink and fill with hot faucet water to warm the extract.

Pro-Brewer Tip:

If using a refrigerated liquid yeast, remove it now to allow it to begin warming.

2. MASHING

- Add grains to the muslin bag & tie a knot.
- Add at least 2 1/2 gallons of water to a large pot and place the bag of grain in the water.
- Heat to 175°F, then turn off heat, and allow to steep for 10 minutes.
- Lift & drain the grain bag, and dispose.

♥ FYI: The boil volume can be flexible, however, typically the larger the boil volume the better. If possible, we suggest boiling at least 3 to 4 gallons. This allows greater efficiency for hop extraction & reduced risk of burning sugars from the extracts.

3. THE BOIL

♀ 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 provide preservation qualities.

- Slowly add the warmed liquid extract and all the dry extract to the boil kettle.
- · Stir well and carefully begin

- heating again until reaching a 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.

4. COOLING

- From this point forward, sanitation is imperative! Any instruments or utensils coming in contact with the wort should be well sanitized.
- Create an ice bath in an empty sink & place the boil kettle in it.
- Cool the wort as quick as possible to 85°F, higher temperatures can kill the yeast.

Pro-Brewer Tip:

Use an immersion cooler or plate chiller for fast & easy cooling.

- Sanitize the fermenting vessel & equipment you will be using.
- If using dry yeast, add it to a sanitized container & combine with 1 cup of warm water, around 85°F, and allow to rest for 10 minutes (skip if using a starter).
- Add 2 gallons of cool water to the fermenter.

- Add the yeast mixture or starter to the fermenter.
- Pour the cooled wort from the boil kettle into the fermenter. Though not harmful to the beer, attempt to leave most of the sediment behind in the boil kettle.

Pro-Brewer Tip:

A sanitized funnel works great for a glass carboy to make pouring easy as well as to aerate the wort!

 Top off with as much cool water as necessary to reach a final volume of 5 gallons.

Pro-Brewer Tip:

Now is the time to take the temperature and hydrometer reading for the Original Gravity (the target OG is listed at the top of this page). Make sure the wort is well mixed and record both of these numbers somewhere safe to reference later.

- Seal the fermenter with the sanitized lid or stopper.
- Fill the airlock about halfway and insert into the lid or stopper.

Pro-Brewer Tip:

Use a blow off tube instead of the airlock to avoid it clogging during the initial vigorous fermentation.

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





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 recomend 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.

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

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

| °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.



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.