New England IPA

This New England Style IPA is pale gold in color with a slight haze. Exploding with juicy tropical and fruity notes from the select hops with a restrained bitterness for a more delicious hop flavor and aroma.

IBUs: 20-25 **OG: 1.051 - 1.057** **FG: 1.013 - 1.017**

ABV: 5.75% - 6.00% **Difficulty: Advanced** **Color: Hazy Pale Gold**

Contents

6.6 lb Golden Light LME
1 lb Corn Sugar
8 oz Flaked Oats
8 oz Brewer's Malt

1 oz Cascade
2 oz Galaxy
3 oz Citra
4 oz Mosaic
1 packet Lallemand Verdant

Muslin Grain Bag
5 oz Priming Sugar

Glossary

DME - Dry Malt Extract
LME - Liquid Malt Extract
IBU - International Bittering Units
ABV - Alcohol by Volume
OG - Original Gravity
SG - Specific Gravity
FG - Final Gravity
CO2 - Carbon Dioxide
Kettle - Brewing Pot
Trub - sediment from fermentation
Krausen - foam during fermentation

Recommended Brew Day Equipment

- 5 Gallon Brew Pot (or larger)
- 6.5 Gallon Fermenter
- Airlock
- Long Spoon or Paddle
- Hydrometer
- Thermometer
- No-Rinse Sanitizer
- Cleanser
- Sink and a bag of ice
- A good beer

NOTE: This recipe incorporates late malt additions to ensure the proper color for this beer style. Refer to BREW DAY SCHEDULE.

Recommended Procedures

BREW DAY (DATE ___/___/___)

1. READ
Read all of the recommended procedures before you begin.

2. SANITIZE
Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

3. STEEP GRAINS
Pour 2.5 gallons of clean water into your brew pot and begin to heat[1]. Pour crushed grains into grain bag and tie a loose knot at the top of the bag. When the water is within an appropriate steeping temperature (150° - 160°F)[2] place the grain bag into the brew pot. Steep grains for approximately 20 minutes. Remove grain bag and allow liquid to drain back into brew pot. Your water is now wort.

4. START BOIL
Bring your wort to a gentle, rolling boil. Add **one 3.3 lb can of LME and 1 lb Corn Sugar** to the boiling wort. **The remaining LME will be added later.** Continuously stir the extract into the wort as it returns to a gentle, rolling boil[3].

5. FOLLOW SCHEDULE[4]
As directed on the BREW DAY SCHEDULE (right), slowly sprinkle the hops into the boiling wort. Be careful not to let the wort boil over the pot (reduce heat a bit if it's foaming). Using the provided BREW DAY SCHEDULE, note the time the hops were added to help keep your brew on schedule. Continue the gentle, rolling boil until the boil is complete.

5A. WHIRLPOOL - hops are added after the boil when the beer has cooled to 180°F**.** Stir occasionally in a whirlpool for 20 minutes, then continue cooling.

6. COOL WORT & TRANSFER
Cool the wort down to approximately 70°F by placing the brew pot in a sink filled with ice water[5]. Pour or siphon wort into a sanitized fermenter. Avoid transferring the heavy sediment (trub) from the brew pot to the fermenter.

Brew Tips

[1] We suggest doing a 3.5 gallon boil at minimum. If you have the equipment to boil more than 3.5 gallons feel free to do so. There is no need to change the amount of any of the ingredients.
[2] Pay careful attention not to let your steeping water exceed 170°F which leeches tannins into the wort.
[3] Use a spatula to scrape the contents of LME canisters, and be sure to scrape the bottom of the pot when using extract, so it does not scorch the sugars.
[4] When consumed, hops can cause malignant hyperthermia in dogs, sometimes with fatal results. Even small amounts, including "spent" hops from brewing, can trigger a deadly reaction.
[5] To avoid bacteria growth do this as rapidly as possible. Do not add ice directly to the wort. Alternatively, you can use a brewing accessory like a Wort Chiller

BREW DAY SCHEDULE

The boil will last **60 minutes**. Start your timer and add hops and other ingredients at these times.

Item	When to Add
1 oz Cascade Hops	Start of Boil
3.3 lb Golden Light LME	50 minutes into boil
1 oz Citra Hops	50 minutes into boil
Terminate Boil	60 minutes into boil
2 oz Citra Hops	Whirlpool (see 5A)
2 oz Galaxy Hops	Whirlpool (see 5A)
4 oz Mosaic Hops	Whirlpool (see 5A)

Recommended Procedures (continued)

7. ADD WATER[6]

Add enough clean water (use tap or spring water, not distilled or reverse osmosis) to the fermenter to bring your wort to approximately 5 gallons. Thoroughly stir the water into the wort. Using a sanitized hydrometer take an Original Gravity (OG) reading. Once you are satisfied your wort is at the proper volume and within the OG range, record the OG in the ABV% CALCULATOR (below).

8. PITCH YEAST

Sprinkle the contents of the yeast sachet over top of the entire wort surface (DO NOT REHYDRATE). Stirring is not necessary. Firmly secure the lid onto the fermenter. Fill your airlock halfway with water and gently twist the airlock into the grommeted lid. Move fermenter to a dark, warm, temperature-stable area (approx. 64° - 72°F).

FERMENTATION

9. MONITOR & RECORD

The wort will begin to ferment within 24 - 48 hours and you may notice CO2 releasing (bubbling) out of the airlock[7]. If no bubbling is evident on day two of fermentation, take a gravity reading with a sanitized hydrometer. If gravity has dropped below your OG reading then fermentation is taking place. Take a gravity reading again in one week[8] and confirm fermentation has completed by comparing the gravity reading to the FG range listed at the top of the instructions. If gravity is not in the FG range, continue fermentation until it reaches the FG range. Record your FG reading in the ABV% CALCULATOR (below).

BOTTLING DAY (DATE ___/___/___)

10. READ

Read all of the recommended procedures before you begin.

11. SANITIZE

Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

12. PREPARE PRIMING SUGAR

In a small saucepan dissolve **4.5 oz. of priming (corn) sugar** into 2 cups of boiling water. Pour this mixture into a clean bottling bucket. Carefully siphon beer from the fermenter to a bottling bucket. Avoid transferring any sediment. Stir gently for about a minute. 1 oz of priming sugar is equal to approximately 2.5 tablespoons

13. BOTTLE

Using your siphon setup and bottling wand, fill the bottles[9] to within approximately one inch of the top of the bottle. Use a bottle capper to apply sanitized crown caps.

14. BOTTLE CONDITION

Move the bottles to a dark, warm, temperature-stable area (approx. 64° - 72°F). Over the next two weeks the bottles will naturally carbonate. Carbonation times vary depending on the temperature and beer style, so be patient if it takes a week or so longer.

BREW TIPS

[6] Be careful not to add a volume of water that will cause the wort to fall outside of the OG range specified in the BREW STATS.

[7] Within 4 - 6 days the bubbling will slow down until you see no more CO2 being released.

[8] Consider transferring your beer to a secondary carboy, see "Secondary Fermentation" sidebar below.

[9] Use standard crown bottles, preferably amber color. Make sure bottles are thoroughly clean Use a bottle blaster if necessary to remove stubborn deposits. Bottles should be sanitized prior to filling.

Secondary Fermentation

We recommend brewers use a secondary fermentation. This will allow your finished beer to have more clarity and an overall better, purer flavor. All you need is a 5-gallon carboy, drilled stopper, airlock and siphon setup to transfer the beer. You will also need to monitor and record the SG with your hydrometer when the beer is in the 'primary'. When the fermentation slows (5-7 days), but before it completes, simply transfer the beer into the carboy and allow fermentation to finish in the 'secondary'. Leave the beer for about two weeks and then proceed to Bottling Day.

(SECONDARY RACK DATE ___/___/___)

Recommended Bottling Day Equipment

- 6.5 Gallon Bottling Bucket
- Siphon Setup
- Bottle Filling Wand
- 12 oz. Bottles (approx. 50)
- Crown Caps
- Bottle Brush
- Capper
- Sanitizer
- A friend to help out

Helpful Quick ABV Calculator

If you are topping up your wort with cold water, it can be difficult to accurately measure OG due to foaming and insufficient mixing. We hope this calculator will help you out! Make sure to chill your wort to at least 85 degrees before doing this.

$$\left(\left(\frac{\text{Pre-Dilution Gravity}}{}\ *\ \frac{\text{Pre-Dilution Gallons}}{}\right) + \frac{\text{Added Water Gallons}}{}\right)/5 = \frac{\text{Original Gravity}}{}$$

Note: Temperature can affect your gravity reading, but it is generally less than .002 so don't worry about it for this crude calculator.

$$\left(\frac{\text{Original Gravity}}{} - \frac{\text{Final Gravity}}{}\right) * 131.25 = \frac{\quad}{\text{ABV}}$$

Email us at contact@thirstyquaker.com with any questions, or ask the members of the Jersey City Brew Club on Facebook