



Green and Gold Belgian IPA



⚠ If your kit has **liquid yeast**, put it in the refrigerator as soon as possible.

This Belgian style IPA is big and bold, with balanced bitterness and maltiness. Named after its headliner hops, bright green Centennial and golden Amarillo (literally “yellow” in Spanish), the Mosaic dry hops play along

nicely creating a delicious hoppy harmony. Bursting full of flavor, this is a sessionable beer, so tasty it'll be hard to have just one!

Calculated Approximate: O.G.: 1.076 F.G.: 1.020 ABV: 7.0% IBU: 68 SRM: 5

Kit Ingredients

- Specialty Steeping Grains:
 - 16 oz Goldpils Vienna
 - 8 oz BE Cara 20L malt
 - 4 oz BE Cara 8L malt
- 7 lb Pilsen malt extract
- 1 oz Warrior hops (30 min)
- 1 oz Amarillo hops (½ oz at 15min, ¼ oz at 5 & 2 min)
- 1 oz Centennial hops (½ oz at 10 & 0 min)
- 1 oz Mosaic (dry hop)
- 1 lb Extra Light DME
- 1 lb corn sugar
- Muslin sack to steep grains
- 1 cup corn sugar (for bottling)
- Wyeast 3522, WLP550, or Safbrew S-33 dry yeast

⚠ Please make sure that your kit contains these items. Call us at 608-257-0099 before brewing if any item is missing. Thanks!

Directions

Sanitize everything well! Remember to stir periodically throughout the boil!

0. If you are using liquid yeast, about three to six hours before you are going to brew, remove the yeast from the refrigerator. If it is a Wyeast pack, break the nutrient pack inside the yeast package according to the directions on the package. Leave the yeast out at room temperature until it's time to pitch the yeast into the beer.

Because this is a higher gravity ale, we recommend using one of the following methods to help your yeast ferment your yummy beer:

- a. Make a starter. About 2 days before you are going to brew, mix 3.5 oz of dry malt extract in 1 liter of water, boil for 15 minutes, cool down to below 80F, add your **yeast**, and let ferment for 24 hours. If you are not using a stir plate, you may want to swirl your starter a few times a day. After 24 hours, put the starter in the fridge and leave it in there until about 3 hours before you brew. When it is time to add your yeast at the end of the brew day, decant the liquid and add the yeast sludge at the bottom of the starter container.
 - b. Use multiple yeast packs.
1. Fill your kettle with 8 quarts of cold water, pour the crushed **steeping grain** into the grain sack, tie the sack closed, and place it into your kettle (**Note:** If your brew system allows you to boil more than 8 quarts, feel free to boil more liquid. This will allow you to get a bit better utilization from your hops and reduce caramelization). Turn on heat and bring mixture to 155F and then turn off heat. Steep the grains for 15 minutes. Do **not boil** grains.
 2. While your grains are steeping, heat 4 quarts of water to 170F in a separate pot. After the 15 minute steep, **remove the grains** from the mixture and sparge by rinsing them with the 4 quarts of hot water, collecting the runnings in your boil kettle. Then turn on the heat and bring the



mixture to a boil. You will be boiling the mixture, called wort, for a total of 30 minutes. However, keep reading, because you'll be adding hops during that time.

3. When you achieve a boil, turn off the heat and pour **about half of the liquid malt extract** into the hot water. (Extract may pour more easily if you open the top of the container and place it in a saucepan of hot, not boiling, water for ten minutes prior to pouring. Do not apply direct heat to the jar). Stir extract into wort well.
4. Turn the heat back on and bring the wort to a boil. Upon initial boil the wort may foam up (called a "hot break"). If this happens, reduce the heat until the foam recedes, then turn up the heat, bring back to a boil, and maintain a rolling boil. Start your 30 minute timer at this point in the brewing process. Add **1 oz Warrior** hop pellets and boil the wort for 15 minutes. This hop addition will impart most of the bitterness to your beer.
5. After these 15 minutes, add **½ oz Amarillo** hop pellets and continue boiling for another 5 minutes.
6. After these 5 minutes (20 minutes total), add **1/2 oz Centennial** hop pellets and boil for 5 more minutes.
7. After these 5 minutes (25 minutes total), turn off the heat. You will now add the **remaining half of the liquid malt extract, 1 lb dry malt extract, and 1 lb corn sugar**. Make sure everything is stirred in well. Turn the heat back on, bring the wort to a boil, then add **¼ oz Amarillo** hop pellets and boil for 3 more minutes.
8. After these 3 minutes (28 min total), add the remaining **¼ oz Amarillo** hop pellets and boil for 2 more min.
9. After these 2 minutes (30 minutes total), you are done boiling your beer, so it's time to turn off the heat. As you turn off the heat, add remaining **1/2 oz Centennial** hop pellets. Start to cool your hot wort down by placing your pot carefully into a sink of ice water for 15-30 minutes or by using a wort chiller.
10. Sanitize fermentor, stopper, and air lock with sanitizing material according to its directions.
11. Fill the sanitized fermentor with 2.5 gallons of cold water (use less if you boiled more water than the recipe calls for). Check the temperature of your wort. Once it is 110-120F (or cooler if you boiled more volume and are using less top up water), carefully pour or siphon the chilled wort into the cold water in the fermentor. If necessary, top up to 5 gallons with cold water.
12. Take a temperature reading of the wort. If the wort mixture in the fermentor is below 80°F (not warm to the touch), give the wort a good shake or a good stir with a sanitized metal or plastic spoon. Here you are trying to aerate the wort, which will help your yeast get going. This is also a good time to take a hydrometer reading. The number from this reading is your starting gravity. Add your beer **yeast**. Instructions are on the yeast package.
13. Seal your fermentor. Attach the fermentation lock half filled with water. Ferment at 60°-72°F for around 21-28 days. Note that it can take up to 24 hours for active fermentation to be visible. If you don't see any activity in the air lock or foam on the surface of beer after 24 hours, call us at 608-257-0099. If doing a double stage fermentation, siphon the beer into the glass carboy after 5-7 days in the primary fermentor (the beer may be transferred to the glass carboy as soon as the foam has fallen far enough so the carboy will not overflow).
14. However you ferment, add the **1 oz Mosaic** hop pellets to your beer after 7 days of fermentation (if doing two-stage fermentation, add these hops when you siphon your beer into the secondary fermentor).
15. After around 21-28 days, if your beer has ceased fermentation, you can go ahead and bottle or keg your beer. Whether you bottle or keg, sanitize everything that will contact the beer during packaging, including bottles, caps, kegs, siphon tubing, bottle filler, etc. Also, now is a good time to take a hydrometer reading. This would be your beer's final gravity.
 - a. **Bottling, Single-Stage Fermentor:** Siphon beer into sanitized bottles. Pour just under 1 tsp. corn sugar in each bottle. Cap and turn bottles upside down several times to mix in sugar.
 - b. **Bottling, 2-Stage Fermentor:** Rack the beer carefully off the sediment into a sterilized fermentor or bottling bucket from the carboy. Bring ¾ pint of water to a boil. Turn off heat. Dissolve 1 cup of corn sugar in this hot water and stir gently into the beer. Bottle and cap.

- c. **Kegging:** Siphon the beer into your sanitized keg, purge the oxygen from the head-space, hook up to your CO2, wait, and enjoy!
16. Store upright at room temperature (~70F) for 14 days to carbonate. Beer may then be stored at cooler temperatures to age. Beer may be consumed at any time, though it will continue to improve for several weeks.