



# 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 it's headliner hops, golden Amarillo (literally "yellow" in Spanish) and bright green Centennial, 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.: 1.075 F.G.: 1.019 ABV: 7.0% IBU: 65 SRM: 5**

## Kit Ingredients

- 5 lb Belgian Pilsen malt
  - 4.25 lb US 2-Row malt
  - 1.5 lb Goldpils Vienna
  - 12 oz BE Cara 20L malt
  - 8 oz BE Cara 8L malt
- 1 oz Warrior hops (60 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 corn sugar
- 1 cup corn sugar (for bottling)
- Safbrew S-33 dry yeast, Wyeast 3522, WLP550, OYL-028, or GY003 liquid yeast

⚠ Please make sure that your kit contains these items. Please 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 the yeast ferment the 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 4.5 gallons of water and heat it to 164F. Pour crushed **grain** into your mash tun and add the water. Check the temperature, make sure it is 152F. If it is too low, add hot water to bring up the temperature. Mash the grains for 60 minutes.
2. While your grains are mashing, heat 4.5 gallons of water to 170F in a separate pot. After the mash, vorlauf (drain 1-2 liters, or until wort is running clear and return this liquid to the mash tun) and drain the liquid from the grain. Then, sparge (rinse) the grains with the 4.5 gallons 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 60 minutes. However, keep reading, because you'll be adding hops during that time.

3. 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 60 minute timer at this point in the brewing process. Add **1 oz Warrior** hop pellets and boil the wort for 45 minutes. This hop addition will impart most of the bitterness to your beer.
4. After these 45 minutes, add **½ oz Amarillo** hop pellets and continue boiling for another 5 minutes.
5. After these 5 minutes (50 minutes total), add **1/2 oz Centennial** hop pellets and then stir constantly as you add the **1 lb corn sugar**, make sure it is well stirred in, and boil for 5 more minutes.
6. After these 5 minutes (55 minutes total), add **¼ oz Amarillo** hop pellets and boil for 3 more minutes.
7. After these 3 minutes (58 minutes total), add the remaining **¼ oz Amarillo** hop pellets and boil for 2 more minutes.
8. After these 2 minutes (60 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.
9. Sanitize fermentor, stopper, and air lock with sanitizing material according to its directions.
10. Cool your hot wort down to around 70-80F by placing your pot carefully into a sink of ice water or by using a wort chiller. Carefully pour the hot wort into the cold water in the fermentor. If necessary, top up to 5 gallons with cold water.
11. 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.
12. Seal your fermentor. Attach the fermentation lock half filled with water. Ferment at 65°-72°F for around 14 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).
13. 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).
14. After around 14 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!
15. 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.