



URBAN EST 1981 WINERY
& CRAFT BREWING SUPPLIES

Belgian Heat

Belgian Golden Ale – 5.5 Gal - OG 1.059 – FG 1.010 – ABV 6.4% - IBU 24 – SRM 4

A friend of Connor's moved to Belgium a few years back to start a new job as an Au Pair. On her second night in town she decided to go out a grab a few pints at a local establishment. Being a Canadian, she had the expectation that the local beers would naturally be in the 5% range, little did she know that Belgians do beer differently. After unknowingly consuming 6 or 7 local pints at an 8.5% ABV she was absolutely wasted. She managed to stumble home to her lodging and wake up the following morning with a dreadful hangover! Lesson learned, Belgians like their beers boozy.

*This brings us to our Beer of the Month. We wanted to make one of those infamous Belgian beers. This style is very distinct. They tend to taste reminiscent to a wheat beer, but have significantly more body and a thickness that can be attributed to the alcohol. They are malt heavy and very lightly hopped. The star of Belgian beers is the yeast. Which is why we have chosen **Escarpment Labs Ardennes Ale**. The result is a big, boozy beer that is deceptively smooth and easy drinking. We didn't want to go full Belgian on it, so the ABV is a nice compromise between standard North American beers and Belgian ones.*

Ingredients

Grains

	Amount (lbs)
Pilsner	9.5
Munich Light	1.0
Biscuit	0.5
Carafoam	0.75

Hops

	Amount (oz)	Boil Schedule (minutes)
Saaz (3.2% A.A.)	2.0	90
Saaz (3.2% A.A.)	0.5	30

Yeast

Ardennes Belgian Ale <i>Escarpment Labs from Guelph!</i>	1 Bottle (160g)	Dry Alternative: BE-256 Ale Yeast
---	-----------------	---

Extras

Irish Moss	1 tsp for last 15 minutes of boil	
Dry Malt Extract	150g at bottling for priming	Or Dextrose

Important Tips on Brewing

- Be extra cautious when it comes to cleaning! Once you have stopped boiling your wort everything that gets in contact with the beer **MUST** be sanitary.
- The temperature of your mash is **ABSOLUTELY CRITICAL**. Not being in the 150-155f range can drastically affect your beer. Make sure you correct the temperature once all of the grain has been added to the mash. **This beer is the exception to this rule**, Belgian Heat requires a two stage decoction to get maximum fermentability. Check out the steps under the mashing category to see how to do this.
- Always let your beer ferment for 10 days! Do not disturb it, do not open the lid. It is absolutely natural for the airlock to stop bubbling after a few days, it is still fermenting though.
- **Oxidization:** Airspace is always something to consider. When undergoing primary fermentation airspace is needed so that the beer can bubble up and ferment vigorously without leaking out of the container. The fermentation creates a layer of CO2 that remains in the pail due to the airlock. Once primary fermentation is over and the lid has been opened, the layer of CO2 dissipates and oxygen replaces it. At this point airspace can ruin your beer. When racking into carboys make sure they are filled to the top, or you blast CO2 inside to prevent oxidization. Ask us for details on this!
- Before bottling, make sure you use a priming calculator (many can be found online) to verify the amount of sugar that needs to be added.

[Step by step Instructions on the other side →→→](#)

Instructions

We're going to be producing this beer with the Brew-in-a-Bag (BIAB) method. It is an easy, and cost effective way to make great all grain beer.

Mashing -> converting the grain into a fermentable liquid.

Note: Belgian Heat really benefits from doing a two stage decoction to achieve maximum fermentability. The mashing step is a bit different from normal to achieve this. If you are not comfortable trying this out, mash for 60 minutes at 150°F instead, and then mash out at the standard 170°F.

- 1) The grain will be mashed at 3 different temperatures throughout this process. Temperature #1 is 144-146°F, Temperature #2 is 153-156°F, and temperature #3 is 170°F (standard mash out temperature)
- 2) To get to **temperature #1**, bring 6 gallons of water in your brew pot to 158°F. This is our **strike temperature**. Turn off the heat to the pot. Wrap the muslin/nylon bag around the brew pot and slowly pour all the milled grains into the bag. Stir them in while adding to prevent clumps. The addition of grain should drop the temperature down to 144-146°F range. If it is too high, add a little cold water until it is in range. Hold this temperature for 30 minutes. Keep the heat off unless it dips below 144°F.
- 3) **Temperature #2** time, turn the heat back on and bring the wort up to 156°F. Hold it there for 30 more minutes, if it dips below 153°F turn the heat back on.
- 4) Lastly, **temperature #3**, turn the heat back on and bring the wort to 170°F, this is our mash out. Hold this temp for 10 minutes.
- 5) Time to remove the grain. Lift the bag full of grain out of the brew pot. Let the liquid in the bag dribble into your wort. Once that is done, put the bag inside of a brewing pail, or another empty pot. There will be about 4 gallons of wort in the brewpot, we need to get it to 6 gallons before we can begin the next stage.
- 6) Run warm water through the grains in the bag, aim for 170°F – let it run through the grains and add to the brewpot. Add until you reach 6 gallons.
 - a. **PSA:** It is natural to think that the grains need to be squeezed to get all of the liquid out of them, **DO NOT DO THIS.** Aggressively squeezing the grains will lead to tannin extraction and a doughy taste in your beer. Lightly pressing the bag is fine, but do not try to squeeze every last drop out.

Boiling -> Hop addition time

- 1) Bring 6 gallons of your wort to a rolling boil, and let it boil for 5 minutes, this is called the hot break.
- 2) This beer needs a 90 minute boil instead of the standard 60. Once the 5 minutes have passed, add 2 ounces of Saaz and set a timer for **90 minutes**. With 30 minutes left in the timer, add 0.5oz of Saaz hops. With 15 minutes left add the Irish Moss and the immersion wort chiller if you are using one.
- 3) When the timer goes off, take the pot off of heat and try to get the temperature down to 72°F as quick as possible.
 - a. We love using a wort chiller for this, it can get the beer down to temperature in 20-30 minutes. Otherwise, you can immerse the brew pot in an ice bath, or wait it out. The longer it takes, the greater the risk of infection

Fermentation -> Turning the wort into beer

- 1) After the boil is done it is time to be extra careful in regards to sanitation. We recommend using a no-rinse sanitizer called Starsan. Mix ¼ tsp of it with water in a 500ml spray bottle. Before we touch any part of the beer we spray it with Starsan.
- 2) Transfer the cooled wort into your fermenting pail or carboy. Run it through a strainer to catch any hop or grain residue.
 - a. It is also **an important time to take a hydrometer reading**. It should be around 1.059 give or take a few points.
- 3) Your choice of fermentation vessel is important. During primary fermentation, it will bubble up quite a bit, you want to be sure there is airspace for it to work away. Otherwise the pressure of it will push out the airlock.
- 4) **Make sure the wort has been cooled to at least 25c!!!** Adding yeast at a higher temperature will likely kill it.
- 5) Once the beer is in the fermenter. Open the Ardennes yeast container and pour it in. Make sure to get every drop of liquid from the bottle into the fermenter. Put the bung and airlock in the hole (make sure there is water filled up to the line in the airlock). If using a pail, make sure the lid is sealed tight. Put the pail in a room that is 20°C.
- 6) After 10 days have passed, take a hydrometer reading. It should be somewhere between 1.008-1.012
- 7) Rack the beer into a sterilized 5-gallon carboy. It's important to fill the carboy to the top; airspace can lead to oxidization within 2 days
- 8) Place the beer somewhere cool if possible. We like to chill it around 1°C. A cooler temperature will help clarify the beer. Let the beer sit for 4 days to clarify.

Bottling -> We're getting close to Beer Time now.

- 1) It's now been 14 days since we first starting brewing. Rack the now fermented and clarified beer into your bucket.
- 2) At the same time, mix the 150g of dry malt extract (you can use dextrose too) with 300ml of boiling water and add to the beer. Stir it in VERY gently. Be sure to double check the amount of priming sugar necessary by using a priming calculator first.
- 3) Rack the beer into your bottles or growlers. Then, let them sit for 2 weeks at room temperature. Chill and enjoy!