

Against the Grain

Gluten Free IPA – 5.5 Gal - OG 1.053 – FG 1.012 – ABV 5.4% - IBU 54 – SRM 1

Gluten sensitivity and allergies are something that has become very common over the last few years. By far the biggest downside of this (in our opinion) is that those affected can't drink beer!!!

Our plan was to try and see if we could make a tasty gluten free beer, and I think we may be onto something. Here is an easy to make gluten free beer recipe that everyone can enjoy.

There thankfully is no gluten in hops! With that in mind, the best way to make a beer without gluten is to amp up the hops to hide the lack of grains in the beer. White Sorghum Syrup is great stuff, but it simply just does not taste as good as grain. The Cascade and Centennial hops really come through in this recipe and we think anyone, even non-celiacs will enjoy this one!

Ingredients

Extracts	Amount	
White Sorghum Syrup	6.6LBS (2 containers)	
Hops	Amount (oz)	Boil Schedule (minutes)
Cascade (5.8%)	1.0	60
Centennial (10.8%)	0.5	60
Cascade (5.8%)	0.5	30
Cascade (5.8%)	1.0	10
Cascade (5.8%)	1.0	5
Centennial (10.8%)	0.5	5
Cascade (5.8%)	1.5	*DRY HOP* 4 Days
Yeast		
US-05	11.5g sachet	
Extras		
Irish Moss	1 tsp for last 15 minutes of boil	
Dry Malt Extract	150g at bottling for priming	Or Dextrose

Important Tips on Extract 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.
- DO NOT add the LME or DME to your pot when the heat is on, this can easily scorch the sugars and lead to a bad taste
- To get a lighter colour, add most of extracts in the final five minutes of the boil. The longer they cook the more colour they take on. We recommend adding half the extracts at the start of the boil, and the other half in the final 10 minutes.
- 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 vigoursley 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.

Instructions on the other side →→→

Instructions

This beer will be made from extract. Extract brewing is much easier than all grain, at the cost of being more expensive. Beers made from extract are still delicious, and more than likely people will never notice! We sell high end extracts from Briess, they also happen to be their own malting company, so they know what they are doing when it comes to malting!

Boiling -> Extract and Hop addition time

- 1) In a 5 gallon pot or larger, bring 3.5 gallons of water to a rolling boil. Time to add the extract.
- 2) Turn the heat off and slowly pour one can of White Sorghum LME into the boiling water. This stuff is VERY sticky, stir constantly. *The other container of White Sorghum LME will be added near the end, keep it close but don't add it yet!*
- 3) Turn the heat back on and bring to a boil. Let it boil for 5 minutes, then it is hop addition time!
- 4) Add the 1oz of Cascade and 0.5 ounces of Centennial and start a timer for 60 minutes. All the while keeping the wort at a rolling boil.
- 5) With 30 minutes left in the timer, add 0.5 ounces of Cascade
- 6) With 15 minutes left in the timer add the Irish Moss, and if you're using a wort chiller add that too.
- 7) With 10 minutes left, add 1 ounce of Cascade hops and add the 3.3LB container of White Sorghum Syrup to the boil (be sure to turn the heat off while you do this). Once it is added and mixed, turned the heat back on. Don't pause your timer.
 - a. Make sure to use a spatula to get all of the syrup out of the container, this is your fermentable sugar, so you want to get every last drop!
- 8) With 5 minutes left in the timer add 1oz of Cascade and the other half ounce of Centennial.
- 9) When your timer goes off, turn off the heat and proceed to the cooling stage.
- 10) Now it's time to cool the beer down to 75°F (20-25°C) as quickly 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
 - b. Ultimately you will need 5.5 gallons of wort in your fermenter, you will have to add water to get to this number, what better way to cool down your wort than to add really cold water to it!

Fermentation -> Turning the wort into beer

- 1) After the boil is done it is time to be extra careful in regard 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. Make sure your fermentation vessel has between 5-5.5 gallons of wort in it. Add water to get to that number if you already have not. Be sure to take hydrometer readings before adding the full amount of water, you don't want to accidentally water the wort down too much. Our specific gravity goal is 1.053, add water until you hit that number.
- 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. We recommend our 27L pail for fermentation.
- 4) Make sure the wort has been cooled to at least 25°C!!! Adding yeast at a higher temperature will likely kill it.
- 5) Once the beer is in the fermenter, pour in the 11.5g sachet of US-05 yeast
- 6) 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 in the range of 17-21°C.
- 7) After 6 days of fermentation, it is now time to add the dry hops. Quickly remove the bung and airlock from the pail and pour in 1.5 ounces of Cascade.
 - a. *Removing the bung after fermentation has slowed down can lead to oxygen in the beer. This is why we want to remove it quickly. One way to be sure no O2 gets in the fermenter is to add a bit of dextrose (100g) mixed with boiling water to the fermenter along with the hops. This will spur on a bit of fermentation and create more CO2 in the fermenter.*
- 8) 4 days later, it is now time to proceed to the bottling stage. It has been 10 days total at this point. Remove the lid of the pail and take a hydrometer reading. It should read somewhere between 1.009-1.012.
- 9) Lately, we have been of the opinion that secondary is an unnecessary step. Unless you are kegging, we recommend proceeding to the bottling stage. Clarification can occur in the bottle rather than in a carboy, and the risk of oxidization is greatly reduced.

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

- 1) Rack the now fermented beer into a bucket.
- 2) At the same time, mix the priming sugar with 300ml of boiling water and add to the beer. Stir it in VERY gently.
 - a. Make sure to check out a priming calculator to verify the correct amount of sugar. Too much sugar and your beer will end up foamy, or even start blowing the caps off! Too little and the beer won't be fully carbonated.
- 3) Rack the beer into your bottles or growlers. Then, let them sit for 2-3 weeks at room temperature. Chill and enjoy!