Batch Size: 5 Gallons Mild Nut Brown Ale



### **General Info:**

OG: 1.044 FG: 1.012 SRM: 25 IBU: 15 ABV: 4.5%

Steep Temp: 155° Steep Time: 60 mins Boil Time: 60 mins

Primary Ferm Temp: 63-74° See specific yeast recomendation

### KIT RECIPE:

6 lbs. Golden Light LME or 5 lbs. Golden Light DME

- 4 oz Chocolate Malt
- 4 oz Special B
- 4 oz Biscuit
- 4 oz Special Roast

### **Hop Additions:**

- 60 min 1 oz Willamette
- 10 min 0.5 oz Fuggle
- 10 min 1/2 Whirlfloc tab

### **Recommended Yeast**

- Imperial A31 Tartan
- Wyeast 1098 British
- Safale S-04 Dry Ale

# NOT INCLUDED BUT REQUIRED:

- Sanitizer
- Hops bag
- Priming sugar (dextrose)
- Bottling Caps

## Brew Day:

Follow yeast instructions. Some yeast are pitched cold others need time at room temputature. Do not expose yeast to temps higher than 80°.

## 1. Steeping Grains:

Place the muslin bag full of grains into 1.5 - 2 gallons (or the full 6 gallon boil volume) of 165° water for the "Steep Time." Once you add the grains the water temp will drop approximately 10 degrees to the "Steep Temp." Remove the grain bag, discard and bring to a boil. Shut off the heat source and add the Extract, making sure that the syrup does not scorch on the bottom of the kettle. Add additional water to bring the total volume to 6 gallons. Return the kettle to heat and bring back to a boil. [see below if your kettle won't accommodate a 6 gallon boil]

### 2. The Boil:

Adjust heat to reach a medium rolling boil. Once the boil starts set your timer for the "*Boil Time*" and begin following the "*Hop Additions*" schedule.

[NOTE: If your kettle volume is under 6 gallons pre-boil enough additional water so that you can top-off the batch. For example: If you have a 5 gallon kettle you will only be able to boil 3-4 gallons without boiling over. This will require additional water to add to the wort to reach desired 5 gallon batch size. Remember, the boil will reduce the vlume .5 - 1 gallon per 60 mins of boil time. So if your starting boil volume is 4 gallons expect it to reduce to 3 gallons after 60 mins. As a result you'll need 2 additional pre-boiled gallons to reach the desired batch size.]

VERY IMPORTANT: Once the wort stops boiling everything that comes into contact with it needs to be sanitized. Avoid exposing it to open air or other possible situations where microbes can be introduced, which can result in off flavors.

## 3. Cool

At the end of the boil the wort needs to be chilled to 80°F as fast as possible, ideally less than 30 mins. If you have a chiller, sanitize it by placing it in the boil for the last 10 mins. If not, cover the pot and place it in an ice bath.

## 4. Transfer

Sanitize the fermenter, your hands and anything else and transfer the wort into the fermenter, leaving the "trub" in the bottom of the pot. Top off the fermenter to the 5 gallon mark with cool <u>sterile</u> water or pre-boiled tap water. When pouring be aggressive to allow a generous splash which will

## Mild Nut Brown Ale



#### TIPS:

### **How to Calculate % of Alcohol:**

The basic formula used by most homebrewers is pretty simple: ABV = (OG - FG) \* 131.25.

ABV = alcohol by volume, OG = original gravity, and FG = final gravity. So, using this formula with a beer having an OG of 1.055 and a FG of 1.015, your ABV would be 5.25%.

# Benefit of Secondary fermentation:

The first benefit of secondary fermentation is that the beer will have a much purer taste because it leaves behind the sediment and prevents the dead yeast from steeping into the taste of your beer (it will also be clearer).

The secondary fermentation is also a good time to Dry Hop or for additional ingredients to add final flavors. Doing so maximizes the exposure without risking volatile aromas.

### TERMS:

Grist milled grain
Rack transfer wort
SG specific gravity
OG original gravity
FG final gravity
Mash grist and water

Wort the liquid extracted during

the mash process

Pitch adding yeast to wort

aerate the wort. Leave enough wort to take a sample for the hydrometer reading and record the Original Gravity. Discard the sample, do not add it to the the wort. This risks contamination.

## 4. Pitch the Yeast

In this step we will be dissolving oxygen into the wort for yeast growth. Aerate by splashing with a lid on or other method like a diffusion stone. Make sure the wort and the yeast are at room temperature. Sterilize everything that will come into contact with the packaging and follow the instructions to pitch the yeast. Fill the airlock with sterile water and place it on the fermenter. Place the fermenter in a dark place that will keep the temperature in range for the yeast used. Within 12-36 hours you should see a foam krausen on the top and CO2 bubbles in the airlock.

### **Primary Fermentation 1-2 Weeks**

Check the airlock regularly during the first couple of days. If there is liquid or foam pushing up through the airlock you may need a blowoff tube. Most of the primary fermentation will end in the 1st week or so, but keep it in the primary fermenter while the air lock is still active (bubbling).

### Secondary Fermenter 1-2 Weeks (if desired)

Sanitize the siphoning equipment and the secondary fermenter. Place the primary fermenter on a counter and the secondary on the floor. Place the dry hops and other additions, if included, in the bottom of the secondary. Siphon the beer into the secondary fermenter ensuring no splashing. At this point, oxygen is a threat to the beer. Replace the sanitized airlock and lid/bung and place the fermenter back in a dark area.

## 5. Bottling

- IMPORTANT! Sanitize anything that will be used during this stage.
- IMPORTANT! Do not to introduce oxygen by splashing or agitating the beer. For about 2.5 Volumes of CO2, use 4.5 oz of corn sugar. Sanitize bottles, caps and all bottling equipment. Mix the corn sugar with 2 cups of water and bring to a boil for 10 minutes. Cover and let cool to room temp. Pour the mixture into the bottom of the bottling bucket. Transfer the beer into the bucket and take a sample for the Final Gravity measurement in the hydrometer. This sample should be before the beer mixes with the corn sugar. We recommend taking the sample from what is left in the fermenter. Fill with a bottle filler and cap the bottles paying attention to sanitation. Store the

bottles at room temperature in a dark place for 2 weeks.