Brew & Grow

O.G. 1.039-1.045
F.G. 1.008-1.014
IBU's 55

Eric The Red

Before We Start. . .

Please take a moment to go over the instructions and inventory check list to make sure you have all the ingredients before you get started. If you have a Wyeast smack pack, please smack yours at least 6 hours before brew time. The pack will swell over time to show activation. If you have any questions, please give us a call at (763) 780-8191.

Clean & Sanitize

Thoroughly clean and sanitize all brewing equipment that will come in contact with your wort or beer. Proper cleaning agents include PBW, B-Brite or 1 Step. Proper sanitizing agents include Star San or Iodophor (BTF).

Definition*

Cleaning - To make free from dirt, dust, and build up, as well as unstained.

Sanitizing - To make free from live bacteria or other microorganisms.

Inventory Check List

Specialty Grains
- ☐ 6 oz Caramel 60L
- ☐ 4 oz Roasted Barley

Fermentables
- ☐ 6 lb Gold LME

Hops
- ☐ 2 oz Cascade (Bittering)
- ☐ 1 oz Cascade (Aroma)

Recommended Yeast
Safale US-05 Dry Yeast
Wyeast 1056 American Ale

Steeping Grains

If you did not have your grains crushed in our store (in-store milling at no charge) then you may use a rolling pin or an empty beer bottle to lightly crush (do not pulverize) the grains (cracking the grains with a bottle or rolling pin is best done in a zip lock bag with small pin holes punched into it). Pour the cracked grains into a muslin or nylon bag and tie a knot at the top of the bag. Pour in a minimum of 2.5 to 3 gallons of water into your brew kettle. If you have a larger brew kettle you may want to boil up to 6 gallons. Advantage for this is boiling a larger volume will result in better hop utilization and less caramelization. Disadvantage for this is an immersion chiller or counter flow chiller will be needed to cool your wort rapidly. Turn your heat to high and let the temp come up to 150°F to 165°F. Place the bag with your grains into the kettle and let steep for at least 20 to 30 minutes at that temp. After steeping, remove grain bag.

The Boil

- **Step 1** - Put all the extract (dry and/or liquid) into your kettle. Make sure to stir the water so the malt extract does not scorch to the bottom of the kettle. Fully dissolve all extracts before moving to step 2.
- **Step 2** - Bring your wort to a rolling boil (212˚F).
- **Step 3** - Add your bittering hops, a few pellets at a time. Watch for boil overs at this stage. Start the timer and boil the wort for 50 minutes stirring constantly to help prevent boil overs.
- **Step 4** - Add Whirlfloc tablet and Nutrient Blend (optional). Boil the wort for 5 minutes.
- **Step 5** - Add the aroma hops. Boil the wort for 5 minutes.

Cooling Wort

Cool the wort down to approximately 70˚F to 80˚F. The fastest and most effective way to cool down the hot wort is with a wort chiller. If you don't have a wort chiller, set your covered brew kettle in a sink with ice water. Remove the cover and stir every couple minutes, as well as agitating the ice bath on the outside of the kettle.

Transfer

Pour or siphon the cooled wort into the primary fermenter and add enough sanitized water (water that has been boiled and allowed to cool to 60˚F to 80˚F) to the fermenter to bring your wort to approximately 5 gallons. Record the O.G. (original gravity) at this point in time.

Aerate

It is recommended that you add additional oxygen to the wort. The most effective way is to use an aeration system with a diffusion stone and oxygen tank. If you don't have this, you can seal/cover the fermenter and rock back and forth vigorously for a constant 45 seconds.

Yeast

- Dry Yeast - Prepare the yeast by sanitizing a small glass and spoon. Fill the glass with approximately 3oz of cooled boiled water (70˚F – 80˚F). Pour the dry yeast into the water and cover the glass with a piece of sanitized tin foil. Allow this to sit for 15 minutes, then stir before pitching (adding the yeast to your wort).

- Liquid Yeast - Confirm activation in the smack pack. Use sanitized scissors to cut off a corner of the smack pack and carefully pour the yeast into the primary fermenter.

Fermentation

Seal the fermenter and add approximately 1 Tablespoon of water or sanitizer to the airlock, insert the airlock into the rubber stopper or the grommet in the bucket lid. Place the fermenter in a cool, dark place to allow fermentation to take place. Ideal Ale fermentation temp is 62˚F to 75˚F. Ideal Lager fermentation temp is 42˚F to 58˚F. Let the beer ferment 5 to 10 days, then siphon over the beer from your primary fermenter into your secondary fermenter. If you are using a single stage fermenter, let the beer sit for 14 to 24 days.

Bottling

Before you start your bottling day, take a hydrometer reading every other day until you get the same reading constantly to be sure that the yeast is done fermenting your beer. Boil 1 cup of water, dissolve 5 ounces of priming sugar into the boiled water. Boil the sugar water for approximately 5 minutes. Cool the solution down to 70˚F to 80˚F. Record the F.G. (final gravity) of your beer at this point in time, then add the sugar solution to the bottom of the bottling bucket. Next, siphon your beer into your bottling bucket on top of the priming sugar solution. Fill and cap the sanitized bottles, then move them to a cool dark place 64˚F to 72˚F for two weeks. Carbonation times vary depending on the temperature and beer style, so be patient if it takes a week or so longer.

Drink Up & Enjoy!

Inspected____/____

Contact the professionals at BREW & GROW for any questions or concerns (763) 780-8191