





# **Angry Ranger IPA**

#### What You Get

- 1 Classic American Light Brewing Extract (HME)
- 3 Packets of Dry Brewing Yeast (1 Under the Lid of the Brewing Extract)
- 2 Packets of BrewMax DME Smooth
- 1 Packet of Booster
- 2 Packets of Columbus (1oz packets)
- 2 Packets of Simcoe Hops (1oz packets)
- 3 Packets of Cascade Hops (1oz packets)
- 4 Muslin Hop Sacks
- 1 Packet US-05 Yeast
- 1 Packet of No-Rinse Cleanser

### **STEP 1: Sanitizing**

Cleaning is one of the most important steps in brewing. It kills microscopic bacteria, wild yeast, and molds that may cause off-flavors in your beer. Make certain to clean all equipment that comes in contact with your beer by following the directions below:

- 1. Fill clean keg with warm water to line mark 1 on the back, then add ½ pack (about 1 tablespoon) of No-Rinse Cleanser and stir until dissolved. Once dissolved, the solution is ready to use. Save the remaining ½ of No-Rinse Cleanser because you will need it for bottling.
- 2. Screw-on lid and swirl the keg so that the cleaning solution makes contact with the entire interior of the keg, including the underside of the lid. Note that the ventilation notches under the lid may leak solution. Allow to sit for at least 2 minutes and swirl again.
- 3. To clean the spigot, open it fully and allow liquid to flow for 5 seconds and then close.
- 4. Pour the rest of the solution from the keg into a large bowl. Place your spoon/whisk, can opener and measuring cup into the bowl to keep them cleaned throughout the brewing process. Leave them immersed for at least 2 minutes in cleaning solution prior to using.







5. After all, surfaces have been thoroughly cleaned, do not rinse or dry the keg or utensils. Return lid to top of keg, proceed immediately to brewing.

#### **STEP 2: BREWING**

Brewing beer is the process of combining a starch source (in this case, a malt brewing extract) with yeast. Once combined, the yeast eats the sugars in the malt, producing alcohol and carbon dioxide (CO2). This process is called fermentation.

- 1. Remove the yeast packet from under the lid of the can of Brewing Extract, then place the unopened can in hot tap water.
- 2. Place 1 & 1/2 packets of the Columbus Hops in a hop sack, tying it closed & trim away excess material, place 1 & 1/2 packets of the Simcoe Hops in a hop sack, tying it closed & trim away excess material, Place 1 & 1/2 packet of Cascade Hops in a hop sack, tying it closed & trim away excess material. Then place the remaining 1/2 packet of Cascade, Simcoe and Columbus in a hop sack, tying it closed & trim away excess material. Make sure you know which hops are in which hop sacks.
- 3. In your clean 6-quart or larger pot pour 8 cups of water. Add in the booster and mix until dissolved.
- 4. Slowly sprinkle in both packets of DME, 1 at a time, into the pot of cool water and stir to dissolve. Increase your heat to medium-high. Continue stirring constantly to keep the rising foam in check. If it begins to rise, pull the pan off the heat and lower the temperature slightly, continuing to stir (about 5 to 20 minutes depending on your particular conditions), until you hit the hot break which is where the foam has subsided and the solution is now boiling.
- 5. Once you have reached hot break add the hop sack with Chinook hops to boil for 60 minutes.
- 6. 30 minutes into your 60-minute boil (step-5) add in the hop sack with Simcoe Hops to boil for 30 minutes.
- 7. 50 minutes in your 60-minute boil (step-5) add in the hop sack with Cascade Hops to boil for 10 minutes.
- 8. Once your 60-minute boil is up (step-5) remove your pot from the heat and add in the last hopsack that contains 1 packet of the Chinook, Simcoe, and Cascade Hops. You will leave all hop sacks in for the duration of fermentation.
- 9. Open the can of Brewing Extract and pour the contents into the hot mixture in your pot. Stir until thoroughly mixed. This mixture of unfermented beer is called wort.







- 10. Fill your fermenter with cold tap water to the mark 1 on the back. If using any other fermenter this would be approximately 1 gallon of water.
- 11. Pour the wort into your fermenter, and then bring the volume of the fermenter to mark 2 by adding more cold water. (If you have a different fermenter top it off with cold water to the 8.5-liter mark).
- 12. Stir your wort mixture vigorously with your sanitized spoon or whisk.
- 13. Sprinkle the US-05 yeast packet into the keg, and screw on the lid. Do not stir.

Put your fermenter in a location with a consistent temperature between 68° and 78° F (20°-25° C), and out of direct sunlight. Ferment for 14 days.

### **STEP 3: Dry Hopping**

Dry hopping is the process of adding hops to a beer which will impart more hop flavor and aroma in your beer.

1. At day 12 of fermentation open, the remaining packet of Cascade Hops with clean scissors. Careful remove the lid from your fermenter and dump the pellet hops in. Quickly close the lid.

## STEP 3: Bottling & Carbonating

After 14 days, taste a small sample to determine if the beer is fully fermented and ready to bottle. If it tastes like flat beer, it is ready. If it's sweet, then it's not ready. Let it ferment for 3 more days (17 total). At this point, it is time to bottle. *Do not let it sit in the fermenter for longer than 24 days total*.

- 1. When your beer is ready to bottle, fill a 1-gallon container with warm water, then add the remaining ½ pack of the No-Rinse Cleanser and stir until dissolved. Once dissolved, it is ready to use.
- 2. Distribute the cleaning solution equally among the bottles. Screw-on caps (or cover with a metal cap if using glass bottles) and shake bottles vigorously. Allow to sit 10 minutes, then shake the bottles again. Remove caps and empty all cleaning solution into a large bowl. Use this solution to clean any other equipment you may be used for bottling. Do not rinse.
- 3. Add 2 <u>Carbonation Drops</u> to each 740-mL bottle. For 1-liter bottles, add 2 ½ drops; for ½-liter bottles add 1 drop. Alternatively, you can add table sugar using <u>this table as a guide</u>.
- 4. Holding the bottle at an angle, fill each bottle to about 2 inches from the bottle's top.



- 5. Place caps on bottles, hand tighten, and gently turn the bottle over to check the bottle's seal. It is not necessary to shake them.
- 6. Store the bottles upright and out of direct sunlight in a location with a consistent temperature between 70°-76°F or 21°-24°C. Allow sitting for a minimum of 14 days. If the temperature is cooler than suggested it may take an additional week to reach full carbonation.

## **Tip from our Brewmasters**

After the primary carbonation has taken place your beer is ready to drink. We recommend putting 1 bottle in the refrigerator at first for 48 hrs. After 48hrs. give it a try and if it is up to your liking put the rest of your beer in the fridge. If it does not taste quite right, leave the bottles out at room temp for another week or so. Keep following this method until your brew tastes just how you like it.

This process is called conditioning and during this time the yeast left in your beer can help clean up any off-flavors. Almost everything gets a little better with time and so will your beer.