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BREW

# Resilience IPA 5 Gallon Extract Instructions

**\*Proceeds donated to Campfire recovery\***

## Cleaning and Sanitizing

Both a cleaner and a sanitizer should be used. Each has their own function. Cleaners remove organics which are food for unwanted contaminants.

PBW is an example of a cleaner. Use 1 tablespoon in 2-3 gallon of warm to hot water. Let it soak. Scrub surface with brush and rinse 3 X using water.

Sanitizers remove the unwanted contaminants (bacteria and yeast). Star San is an example of a sanitizer. Dilute ½ oz in 2.5 gallons. Place in a spray bottle and or dip equipment just prior to use. It can be used wet. 30 seconds of contact will kill 98% of the bacteria. A good rule is to clean all your equipment after its use. Then it will be ready to sanitize just before use.

## The Recipe

**IBU=64 ABV= 6.3 % OG=1.065 EG=1.016**

**Extract:** 6.6 lb Pilsen Light LME 2 lb Pilsen Light DME

**Grains:** (Place the grains in the muslin bag)

Crisp 60L (1.25lb)

**Hops:**

1.0 oz. Centennial hops @ 80 min

1.0 oz. Cascade hops @ 15 min

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0.5 oz. Cascade hops @ Whirlpool

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0.5 oz. Cascade hops @ dry hop

0.5 oz. Centennial hops @ dry hop

**Priming sugar:** 5 oz corn sugar

**Liquid Yeast:** Omega OYL-004

## The Process

Activate Liquid Wyeast pack 3-24 hrs before brewing.

1. Heat the water to 160 degrees F and turn off the heat.
  - If the water is city water, the chlorine needs to be removed. Either use a carbon filter or let it sit out overnight. Don't use well or RO water. Buy spring water from the store.
  - Rule of thumb; boil as much water as your pot allows. (Up to 5 gallons) 0.5-1 gallon will be lost in boiling (60 minute boil). Top to 5 gallons on the fermentor.
2. Steep the **grains** for 20-30 minutes.
3. Remove grain bag and discard.
4. Heat the wort to just below a boil.
5. Turn off your heat source then add ½ the **extract** using the whirlpool technique so the extract dissolves, and doesn't burn on the bottom of the kettle. After it is all dissolved, turn the heat back on.

6. Bring to a boil. Start the timer countdown (80 minutes). Add the **Hops** as specified in the recipe.
7. Timer at **15 minutes**: Add the remainder of **extract**. (Optional): add **Yeast Nutrient** and **Whirlfloc** or **Irish moss**.
8. Timer at 0: Stop heating. **Note: Everything that touches the beer from this point on should be sanitized.**
9. Remove from heat and **Chill wort (use an ICE BATH IF NO CHILLER)**.
10. When **Temperature** of wort is less than 73 degrees F:
  - Transfer to fermenter splashing wort to oxygenate. Top off to 5 gallons with water if needed. **Oxygenation is needed to help the yeast get started. Pour the beer back and forth between 2 sanitized buckets or shake the carboy for 2 minutes.** Note: This will be the only time you want to oxygenate the wort. Avoid exposing the beer to air anytime after this point.
  - Pull a sample and Record starting **Specific Gravity OG= \_\_\_\_\_**
  - **Add Yeast and airlock.** Add the dry yeast to 1/4 cup of lukewarm preboiled water 10 min before pitching. If using liquid yeast pitch directly into fermentor.
  - You will want to rig a blow-off tube.
11. Place the fermenter in dark cool spot (**65-73 degrees F**).
12. The next day check, for activity. It could take up to 48 hours for the airlock to start bubbling.
13. Ferment until the krausen that has formed on top has dissipated (usually 2 weeks).
14. Rack into a 5 gallon **Carboy**. By secondary fermenting, the beer will clarify and the flavors will mature.
15. Wait 2 weeks. Record Ending Gravity: **EG= \_\_\_\_\_**
16. **Bottle:** Dissolve priming **Sugar in 1 cup of preboiled hot water and place into sanitized bottling bucket and tubing. Rack the beer on top.** Sanitize the caps and bottles then bottle using the bottling bucket and bottle filler, fill each bottle 1 inch below the top and cap. Store them at room temperature while carbonating.
17. Wait 2 weeks.....Chill your first beer and test for carbonation... It could take up to 3 weeks to fully carbonate.

**Cheers!!!!!!!!!!**