

## Steam Freak:

### Sahara Nevada Pale Ale (Clone)

Starting Gravity 1.048 – 1.052

Final Gravity 1.012 – 1.016

IBU 46 - 50

#### Kit includes:

6.6 lbs Liquid Malt extract	Priming sugar
8 oz Carmel Malt 10L	60 Bottle Caps
8 oz Cara-pils Malt	Brewing Yeast
2 oz Cascade Hops	Grain Bag
2 oz Perle Hops	

## Start Here



### 1. Read

Important, Please read all of the instructions before you begin.

### 2. Sanitize

Thoroughly clean and sanitize all of your brewing equipment. Anything that may come in contact with your brew needs to be sanitized.

### 3. Steep Grains

Pour 2.5 gallons of clean water into brew pot (20 quart capacity is ideal) and heat to 155-165°F. Place your crushed grains into the enclosed grain bag and tie a loose knot at the top of the bag. When the water reaches the appropriate steeping range (155 – 165°F) place the grain bag into the 2.5 gallons of water. Let the bag of grains steep for 20 minutes. After 20 minutes remove the grain bag, and without squeezing, allow the liquid to drain back into your brew pot. Discard the grain bag. Your mixture will now be referred to as *wort*.

### 4. Start The Boil

Bring your wort to a gentle boil. While stirring, add all the Liquid Malt Extract to the boil. Keep stirring the extracts until the wort returns to a gentle rolling boil.

### 5. Add Hops

Slowly sprinkle 2 oz Cascade hops on to the boil, and boil for 15 minutes. Be careful not to let the wort boil over (If the wort begins to foam over, lift off the heat until foam goes away. Place back on the heat and continue on. After 15 min add the 2 oz of Perle hops and boil an additional 15 minutes.

## Tips

- ***In step 2***, Use Basic A or similar.
- ***In step 3*** make sure the grains stay loose in the bag. Do not pack them tight.
- ***In step 3*** make sure that your temperature does not exceed 170°F. Exceeding 170°F may result in hazy beer. Temperatures under 155°F will cause incomplete sugar extraction.
- ***In step 4*** it is important to keep stirring so that the malts do not sit on the bottom of your brew pot. If this happens you run the risk of your malt burning. Keep stirring until all of your malt is dissolved.
- ***In step 5*** make sure you keep track of which hop you are adding and the time it requires to be boiled.
- ***If you have any questions before or during this process please call 1-800-353-1906***



## 6. Cool Down

Cool down the wort to approx 70°F. Do this by placing your brewing pot into a sink filled with ice water. Once cooled, pour the wort into the previously sanitized fermenter. Try to leave behind any heavy sediment that might be at the bottom of your boiling pot.

## 7. Topping Off

Add water to bring your total batch size to 5 gallons. Be careful not to exceed 5 gallons as this will throw off your beers intended flavors and styling.

## 8. Add Yeast

Cut open the packet of brewing yeast and sprinkle over the top of the wort's surface and stir. Fasten lid onto the fermenter. Fill the air-lock half way with water and attach on top of the fermenter.

## 9. Fermentation

Be sure to place the fermenter in a location that can be kept at a constant 70 – 75°F. The wort will begin to ferment within 24 hours and you will start to notice bubble in your air-lock. After about 4 – 6 days, the bubbling will slow down and eventually stop. After 48 hours have passed with no bubbling, remove lid and take a hydrometer reading to verify your beer is actually finished fermenting. Your final Specific Gravity reading should be between 1.012 and 1.016. If your hydrometer reading is not in this range wait 2 more days and take another hydrometer reading.

## 10. Bottling

You will need to sanitize approx. 55 – 12 oz. beer bottles and anything that will come in contact with your beer during the bottling process. During the fermentation process your beer produced sediments that are currently laying on the bottom of your fermenter. Before bottling you will want to transfer the beer off these sediments into a clean, sanitized container, and then bottle from it.

## 11. Priming Sugar

Once the beer has been transferred, dissolve the priming sugar in 2 cups of boiling water in a sauce pan on the stove. Once dissolved add to your freshly transferred beer and stir in thoroughly.

## 12. Bottle

Either through a faucet on the fermenter or with a bottling wand and hose fill the beer bottles to within 1 inch of the top of the bottle. Use a bottle capper to apply sanitized bottle caps to each bottle.

## 13. Conditioning

After all of your bottles have been capped, move them back to a warm area between 70 – 75°F. Leave there for approx 2 weeks. This will give the beer time to carbonate and age.

## 14. Enjoy

After 2 weeks of aging, your beer is now ready to be chilled and enjoyed.

## Tips

- ***In step 6*** make sure you cool the wort down as quickly as possible. **DO NOT ADD ICE TO THE WORT.** A Wort Chiller is handy to have for this step.
- ***In step 9*** you can consider doing a 2 stage brewing process. This will allow your finished beer to have more clarity and overall better flavor. All you need is a second fermenter or carboy. When the fermentation slows down in the 4 – 6 day period simply transfer the beer into a carboy or other secondary fermenter. Attach the air-lock again, and allow the fermentation to finish. Allow the beer to sit for an additional 7 to 10 days, then proceed to step 10. If you have question about this please call 1-800-353-1906.
- ***In step 10*** it is important that you thoroughly sanitize all your bottles. You can run the bottles through the sanitize cycle of the dishwasher to aid in this process.
- ***In step 13*** it is important that you age your beer in the same temperatures that you fermented in. If the area gets cooler than 70°F. then the beer will not carbonate properly.