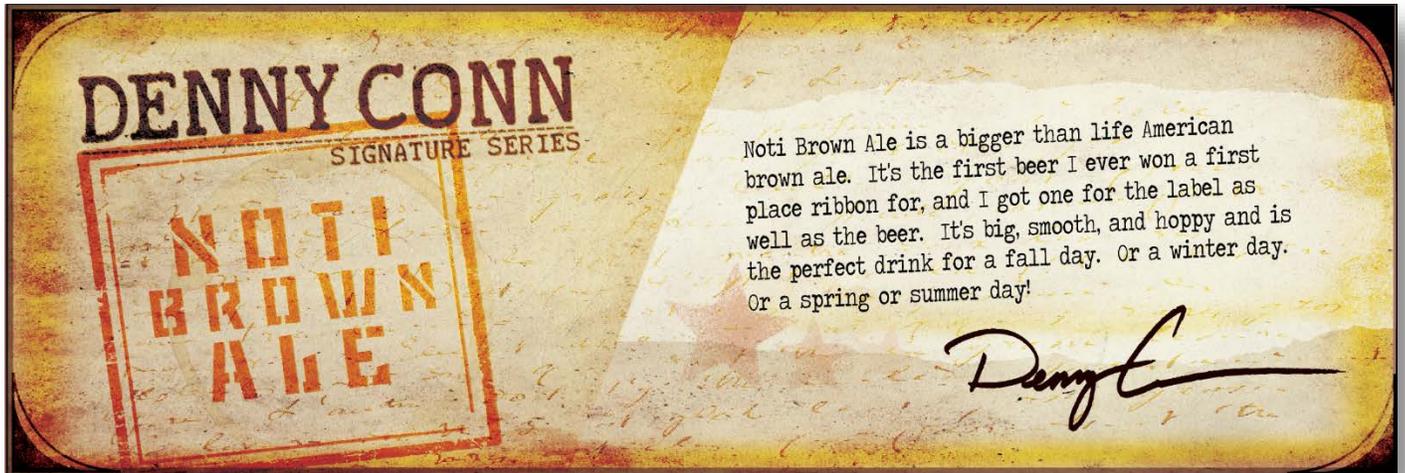




# BREW CRAFT USA

BREW CRAFT USA / *Denny Conn* Signature Series Beer Ingredients Kit



## Contents of this Kit

Brewing Ingredients  
Grain Steeping Bags  
Hop Steeping Bags  
Whirlfloc Tablet  
Yeast Nutrient  
Priming Sugar  
Crown Caps (50)  
Brewing Instruction Sheet

## Specifications of this Beer Style (Anticipated)

Ideal Fermentation Temperature: 68°F  
OG: 1.063 / FG: 1.015  
IBU's: 54 / ABV: 6.4%  
Color: 23.1 SRM  
Yield: 5 gallons

## List of Ingredients

### Fermentables:

4 lbs. Dry Malt Extract (1-3lb. bag, 1-1lb. bag)

### Specialty Grains:

5 lbs. 11.3 oz. Specialty Grains

### Hop Addition 1:

.73 oz. Magnum Hops

### Hop Addition 2:

.73 oz. Willamette Hops

.37 oz. Columbus Hops

### Hop Addition 3:

.37 oz. Willamette Hops

### Hop Addition 4:

.37 oz. Willamette Hops

### Hop Addition 5:

1 oz. Chinook Hops

### Yeast:

Fermentis Safale US-05

*(Denny Conn recommends Wyeast 1450 Denny's Favorite 50 and making a starter)*

## Advanced Procedures for Best Results with this Kit

- Steep grains at 155 degrees Fahrenheit
- No more than 1 ounce of hops per hop steeping bag.
- Use of Secondary Fermenter
  1. After primary fermentation has slowed to only a few bubbles a minute in the airlock, rack this beer to a secondary fermenter, such as a glass or PET carboy, leaving behind the sediment on the bottom of your primary fermenter.
  2. Continue secondary fermentation for another 7-10 days, or until all signs of fermentation have ceased.
  3. Proceed with bottling your beer.

\*\*As your equipment may vary, your efficiency levels will vary with it.\*\*

# Brewing a BREWCRAFTUSA / *Denny* Signature Series Beer Kit

Experience Outstanding Beer™ with Brewcraft USA!



## BREWCRAFTUSA

These instructions are a basic set of guidelines for making beer from this kit and assume that it is the first beer you have ever brewed. Many more advanced procedures are possible and will ultimately help you make even better beer, should you choose to learn them. For now however, if you have never made beer before you should follow these instructions to the letter to get the best results. If you have more experience, feel free to apply your knowledge to the process of brewing this kit. We advise you to read through these instructions from start to finish before you begin brewing to be sure you understand the process.

**Advanced Brewing note: For best results, a stock pot large enough to do a full recipe boil is recommended. Water loss per hour is approx. 1 to 1 ½ gallons during a boil. If a large enough pot is not available to you than you will need to top off the fermenter to 5 gallons.**

### Equipment You Will Need When You Brew

- ✓ 20 qt. Stock pot or larger\* (32 qt. suggested)
- ✓ Fermenter \*(6-gallon plastic pail fermenter and a lid with a hole for rubber stopper/airlock apparatus) with a mark to indicate 5 gallons
- ✓ Grommet\* installed in fermenter lid, fits airlock
- ✓ Airlock\*
- ✓ Hydrometer\* and sample jar
- ✓ Bottling/Transfer 6-gallon pail\*
- ✓ Strainer
- ✓ No-rinse sanitizer\*
- ✓ Distilled or filtered water, about 3 gallons
- ✓ Grain Steeping Bag and Hop Steeping Bags\*
- ✓ Heat-proof spoon\*
- ✓ Thermometer
- ✓ 5 Gallon Carboy or 6-gallon pail (Secondary Fermenter)

\*Such as is provided in a **Brewcraft USA Starter Brewery Equipment Kit**

### Getting Started/Set Up

Time to complete: 15 minutes

1. Wash and rinse all your equipment. If you will be using Denny's Favorite 50 (1450) liquid yeast from Wyeast Laboratories, Inc™, "smack" the package now according to the directions on the package.
2. Mix up 1-2 gallons of no-rinse sanitizer solution, following the manufacturer's instructions, in your fermenter. Put your spoon, thermometer, airlock, hydrometer and jar into the solution to soak.

### Steeping Your Grain

Time to complete: 1 hour, approximately

3. Run 3 gallons of tap water into your stock pot and place on a large burner on your stove. Turn the burner on to medium-high. Place the Specialty Grain that came with your kit into the Grain Steeping Bag. Place Grain Steeping Bag in the water once it has reached 155°F. Turn off the burner and allow the grain to steep for about 20 - 30 minutes with the lid on to hold temperature.
4. While grains are steeping, put 1 gallon of water into a second pot and bring to 170°F.
5. After you have steeped the grains for the recommended time and temperature, turn burner back on to medium high and slowly increase temperature to 170°F. **Make sure not to go above 170°F while steeping grains are in water.**
6. Once temperature has reached 170°F, remove the grain by lifting the grain bag out and place in a strainer over the pot (allow the water to drip back into the stock pot – do not squeeze).
7. Slowly pour 1 gallon of 170°F water from second pot over the grain and let drain into main pot
8. Discard grain once water has drained from them. **Do not squeeze grain as it will release unwanted tannins into wort.**

### Boiling Your Wort

Time to complete: 75 minutes, approximately

9. Bring the contents (now called wort) to a boil, and add the 4 lbs. of Light Dry Malt Extract (1 – 3lb bag, 1 – 1 lb. bag). Stir until Dry Malt Extract has thoroughly dissolved. **BE CAREFUL**, your wort may foam up and boil over at this point. Be prepared to quickly turn off the heat and possibly add a splash of cold tap water to calm the boil.
10. After 10 minutes of boiling, put .73 oz. of Magnum hops (hop addition 1) into a hop steeping bag (you will use a hop steeping bag for all hop additions) and add to boil. [If using a timer, start 60 minute countdown now]
11. Boil for 15 minutes and then add Hop Addition 2 (.73 oz. Willamette and .37 oz. Columbus). (45 minutes left)
12. Boil for 15 more minutes and then add Hop Addition 3 (.37 oz. Willamette). (30 minutes left)
13. Boil for 15 more minutes and then add Hop Addition 4 (.37 oz. Willamette), Whirlfloc Tablet and Yeast Nutrient (Wort may foam up). (15 minutes left)
14. At 0 minutes, turn off burner, add Hop Addition 5 (1 oz. Chinook) and stir wort with sanitized spoon or paddle creating a whirlpool action. (Note: Your wort is now very close to sterile and you must try to keep it sterile. Anything that your wort comes in contact with must be previously soaked in your no-rinse sanitizer solution. Clean hands are essential and food-handlers gloves are also useful from this point forward.)
15. Cover and start cooling your wort. (If using an immersion wort chiller, submerge sanitized immersion wort chiller at this time and start chilling.)
16. While cooling, transfer all equipment from your fermenter to your other bucket. Put the lid on the fermenter and shake gently to be sure the solution contacts all surfaces inside. Take off the lid and set it aside without allowing the sanitized inner surface to become contaminated. Pour the solution into the other bucket.

### Cooling your Wort / Transferring to Your Fermenter

Time to complete: 10 minutes

17. Using your sanitized thermometer, check the temperature of your wort. Further chilling of your wort may be necessary by placing the fermenter in a sink with ice water depending on the temperature of your top off water.
18. Add wort to fermenter and top off with sanitary water until you reach a volume of 5 gallons. (Wort should be 60°F to 70°F.)

- Carefully take a sample of the wort using your sanitized hydrometer jar. Allow this to cool to room temperature, and then check the specific gravity, aka original gravity (OG) of your wort with the hydrometer. Write this number down (between 1.030 and 1.100; **target is 1.063**). Discard the sample wort, do not return to the fermenter.
- Once your wort is below 70°F, add the yeast by tearing open the package and sprinkling it across the surface. Snap the lid tightly on the fermenter. Fill the airlock ½ full with sanitizer solution and insert in the grommet. Put the fermenter in a dark, temperature-stable environment, such as your basement or a closet. . If using Wyeast 1450: *It is important that you have high enough yeast cell count to finish fermenting in the directions below. If a starter is not an option for you then you should double pitch.*

#### Monitoring Fermentation

- During the first 24 to 48 hours of primary fermentation, your beer is in the “lag phase” and it will appear nothing is happening. Don’t worry! Soon your yeast will start turning sugars into alcohol and Co2, plus other flavor and aroma compounds like esters, phenols and sulfur-based aromatics. Keep the lid on tight and resist the temptation to open and check it frequently.
- The next phase your wort will go into is “high krausen” which is peak fermentation characterized by rapid release of Co2 and possible foaming on the surface of the wort. This will last for about three days. Peak fermentation is followed by much slower release of Co2 and a noticeable change to the appearance of your beer, it will begin to clear up and the foam on the top will be gone.
- Once the bubbling action in your airlock slows to 3 to 4 bubbles a minute, rack your beer into a secondary fermenter.

#### Your Finished Beer

- Secondary fermentation should be finished when your airlock slows to 1 to 2 bubbles a minute (or less) and your beer should be fully fermented. Higher gravity beers (1.065-1.100 OG) will require longer secondary fermentation than lighter beers (1.032-1.064 OG). Bubbling in the airlock will slow down to 0-1 bubble per 5 minutes. Carefully check the final gravity with the sanitized hydrometer. Terminal Gravity **target is 1.015 (or lower)**. The difference between the original gravity (OG) and the final gravity (FG) will tell you the approximate alcoholic strength of your beer. Your beer will not get any stronger now; no matter how long you “age” it, fermentation is done.

The alcoholic strength of your beer will be about 1% alcohol per .0075 of gravity drop. *For example, a beer with OG=1.060 (-) FG=1.010 (=) gravity drop of .05 / .0075 = 6.7 % ABV.*

**Fill in your data here:** OG \_\_\_\_\_ (-) FG \_\_\_\_\_ (/) .0075 = \_\_\_\_\_% (approx.) alcohol by volume.

#### Carbonating and Packaging Your Beer

Your beer is flat (un-carbonated) and the yeast has used up all the fermentable sugars now. To make your beer ready to drink, you will need to carbonate and package it by one of several methods. One method is to prime your beer with corn sugar and bottle it. Another is to transfer your beer to a keg and force-carbonate. Your local home brew shop can help you decide which of these processes is right for you. For your convenience, we’ve included a packet of priming sugar, adequate to carbonate the beer you’ve made from this kit and a separate set of instructions, “**Bottling your Brewcraft USA Beer**”.

#### Advancing Your Knowledge and Skills – Brewing Better Beer

Making great beer can be as simple as you have just experienced, or as complex as you want to make it. We strongly recommend you purchase one of the many good books on home brewing in order to advance your hobby. You will learn many small tips and more complex procedures that will help you take your beer to even higher levels of greatness. You can also choose to keep brewing great beer, simply, from **Brewcraft USA Brewery Series, Premium and Ultimate Beer Ingredient Kits!**

**Cheers, Happy Brewing and Drinking!**



These instructions are a basic set of guidelines for bottling your fully fermented Brewcraft Brewery Series, Premium or Ultimate Beer. Bottle your beer about 14-21 days after brewing or after final gravity is reached and there is no further sign of fermentation. You will be adding sugar to the beer in the form of Priming Sugar, and the small amount of yeast still remaining in the beer will re-ferment in the bottle, creating just the right amount of CO<sub>2</sub> (carbonation).

**Equipment You Will Need on the Day You Bottle:**

- ✓ Fermenter\* with 5 gallons of fermented beer
- ✓ Bottling/Transfer 6-gallon pail\*
- ✓ No-rinse sanitizer \*
- ✓ Racking Cane and Siphon Assembly\*
- ✓ Bottle Filler\*
- ✓ Bottle Brush\*
- ✓ Hand Capper\*
- ✓ Disposable food-handler's gloves (optional)
- ✓ Plastic or glass bowl
- ✓ 1-2 qt. sauce pan

\*Such as is provided in a *Brewcraft Starter Brewery Equipment Kit*

**Process Checklist:** Use this checklist to track and record all your bottling steps

- Clean and Sanitize Equipment, Bottles, and Caps
- Boil your Priming Sugar
- Transfer (Rack) Beer to Bottling Pail
- Fill and Cap your Bottles
- Rinse and Store your Bottles at Room Temp until \_\_\_/\_\_\_/\_\_\_ Chill and Drink!

**Getting Started/Set Up:**

Time to complete: 45-60 minutes

1. Wash and rinse well all your equipment and your bottles and caps. Use the bottle brush to clean the bottles.
2. Mix up 1-2 gallons of no-rinse sanitizer solution in your bottling / transfer 6-gallon pail following the manufacturer's instructions. Put your Racking Cane and Siphon Assembly, bottle filler and caps into the solution to soak.
3. Sanitize your bottles: dip each bottle into the sanitizer solution, filling the bottle part-way. Invert the bottle and pour the solution back into the pail. Line up your sanitized bottles on your counter or work table. This is a no-rinse sanitizer, so it is not necessary to drip-dry or rinse away the solution with water. Contact time to sanitize is about 1 minute.

**Transferring Your Beer:** Also known as "racking" your beer.

Time to complete: Approximately 30 minutes

4. Pour approx. 1 qt. of your sanitizer solution into a bowl; discard remaining. Place the caps into the bowl with the sanitizer.
5. Pour the Priming Sugar from your beer kit into the saucepan, add 2 cups of water and boil for 5 minutes. Allow to cool for a few minutes and pour into the sanitized Bottling/Transfer 6-gallon pail.
6. Place your fermenter with beer in it on a kitchen counter and place the sanitized pail on the floor directly beneath it. Use the Racking Cane/Siphon Assembly to transfer the beer from the fermenter to the pail without splashing. Take care NOT TO SIPHON THE YEAST SLURRY/SEDIMENT FROM THE BOTTOM OF THE FERMENTER. There is plenty of yeast in the beer (even if it looks clear) to carbonate your beer in the bottles.
7. Remove the Siphon Assembly from the fermenter when all the beer is transferred, and place both ends in the beer in the lower pail. Set the fermenter with the remaining yeast sediment aside; discard the yeast sediment and clean your fermenter later. Lift the pail with the beer onto the counter where the fermenter was previously.

**Filling and Capping your Bottles:** You may want to recruit a helper for this part

Time to complete: Approximately 45 minutes

8. Attach the Bottle Filler to the tube/outlet end of the Siphon Assembly. The Bottle Filler is designed so that no beer will flow until you touch it to the bottom inside of the bottle. Prime the siphon.
9. Begin filling bottles by inserting the Bottle Filler all the way to the bottom. As each bottle is filled to the top, lift out the Bottle Filler and start filling the next bottle. This is where a helper will be very useful! As you fill your bottles, your helper- wearing food handler's gloves, if desired- can place the caps on the bottles, and crimp down the caps with the Hand Capper. Continue until all of your beer is bottled.

**Finishing Up**

10. Clean up your equipment and dry for storage. Rinse your bottles and replace them in the boxes they came in.
11. Put your bottled beer in a warm (68-70degF), dark place for about 2 weeks. This will allow the yeast to metabolize the sugar and create CO<sub>2</sub> to carbonate your beer. Keep away from UV light to preserve the quality and flavor of your beer.
12. After 2 weeks, move your beer to a cool or cold storage area for longer term storage; or chill for drinking. It is now ready to drink, but may continue to improve over time. Mild and medium strength beers and any hoppy beers are best if drunk while fresh- from 3 to 12 weeks after bottling. Stronger or very dark beers are sometimes at their best after 12-20 weeks or even longer. Lagers are best if not bottled until 4 weeks after brewing, and allowing to rest for another 4-6 weeks in the bottle.

**Cheers, Happy Brewing and Drinking!**