



# BREW CRAFT USA

## *Brewcraft Premium Beer Ingredients Kit*

### **Hoppy German Pilsner**

Traditional German pilsners are typically hoppier than Bohemian pilsner, MUCH hoppier than US pilsners/light lagers... and ours is hoppier still. A part of the perception of more hops is the lightness of the malt, but while we keep the bitterness moderate, we bump up the flavor and aroma of hops; a typical American interpretation of this style. And speaking of malt, in spite of being very pale in color and low in malt body and flavor- the flavor that is there is rich, complex and satisfying. Ferment as cool as you dare, down as low as 42°F at which temperature fermentation may take 3-4 weeks to complete. Then give the beer a 2 day rest at 60-65°F, follow your standard priming procedure, then a long lagering period in your bottles: 4-6 weeks.

#### *Contents of this Kit*

Brewing Ingredients  
Grain Steeping Bag  
Hop Steeping Bags  
Priming Sugar  
Crown Caps  
Brewing Instruction Sheet  
Bottling Instructions

#### *Specifications of this Beer Style (anticipated)*

Ideal Fermentation Temp= 48-54°F  
OG= 1.046 / FG= 1.011  
IBU's= 30 / ABV= 4.7%  
Color= 3 SRM  
Yield= 5 gallons

#### *List of Ingredients*

##### *Fermentables:*

4.5 lb Briess CBW Pilsen Light Dry Malt Extract

##### *Specialty Grains:*

.125 lb Acidulated Malt  
.5 lb Dextra Pils Malt  
.25 Crystal Malt 15L

##### *Bittering Hops:*

1 oz US Tettnang Loose Hops

##### *Flavor Hops:*

1 oz Hallertau Tradition Loose Hops

##### *Aroma Hops:*

1 oz Crystal Loose Hops

##### *Yeast:*

2 packets Saflager W-34/70

8. If your kit came with Flavor Hops, place them in a Hop Steeping Bag and add now. If your kit came with Spices, place them in a Hop Steeping Bag and add now. Turn off the burner, your wort has now boiled for about 1 hour.
9. If your kit came with Aroma Hops, place them in a Hop Steeping Bag and add to the wort now. Allow to rest for about 10 minutes while you complete the following steps. Do not cover.  
*(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 for 1 minute in your no-rinse sanitizer solution. Clean hands are essential and food-handlers gloves are also useful from this point forward.)*
10. Transfer all the equipment from your fermenter to your bottling pail. 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 bottling pail.

#### Cooling Your Wort/ Transferring to Your Fermenter *Time to complete: 10 minutes*

11. Pour 2 gallons of distilled or filtered water into your fermenter. Carefully remove the hop bags from your wort and discard. Very carefully, pour your wort into the fermenter, mixing it with the water. Add more water to fill the fermenter up to the 5 gallon mark if necessary.
12. Using your sanitized thermometer, check the temperature of your wort. It must be below 80degF before you add your yeast. Further chilling of your wort may be necessary by placing the fermenter in a sink with ice water.
13. 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 down this number (between 1.030 and 1.100). Discard the sample wort, do not return to the fermenter.
14. Once your wort is below 80degF add yeast by tearing open the package and sprinkling it across the surface. Snap the lid tightly on the fermenter, and put the stopper in the hole in the lid. Fill the airlock  $\frac{1}{2}$  full with sanitizer solution and insert in the stopper. Once yeast is added, it is no longer called wort- it is now called beer. Put the fermenter in a dark, temperature-stable place like your basement or a closet.  
*(Please see your kit's **Beer Style Specifics** sheet for fermentation temperature and other instructions.)*

#### Monitoring Fermentation

15. Your beer is in the "lag phase" now and it will appear nothing is happening for 1 or 2 days. Don't worry! Soon your yeast will get started turning sugars into alcohol and CO<sub>2</sub>, plus other flavor and aroma compounds like esters, phenols and sulfur-based aromatics. Keep the lid on tight- resist the temptation to open and check it frequently.
16. Your beer will next go through "primary fermentation" characterized by rapid release of CO<sub>2</sub> and much foaming on the surface of the wort. This will last for about 3 days. Then comes "secondary fermentation" characterized by much slower release of CO<sub>2</sub> and a noticeable change to the appearance of your beer- it will begin to turn clear and the foam on top will be gone.

#### Your Finished Beer

17. After about 10-20 days your beer will 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 specific gravity with the sanitized hydrometer. 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 or malt extract and bottle it. Another is to transfer your beer into 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 Premium or Ultimate 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 to advance your hobby you should purchase one of the many good books on home brewing. You will learn many small tips and more complex procedures that will help you take your beer to even higher levels of greatness. Or just keep brewing great beer simply from Brewcraft Premium and Ultimate Beer Ingredient Kits!

8. If your kit came with Flavor Hops, place them in a Hop Steeping Bag and add now. If your kit came with Spices, place them in a Hop Steeping Bag and add now. Turn off the burner, your wort has now boiled for about 1 hour.
9. If your kit came with Aroma Hops, place them in a Hop Steeping Bag and add to the wort now. Allow to rest for about 10 minutes while you complete the following steps. Do not cover.  
*(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 for 1 minute in your no-rinse sanitizer solution. Clean hands are essential and food-handlers gloves are also useful from this point forward.)*
10. Transfer all the equipment from your fermenter to your bottling pail. 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 bottling pail.

#### Cooling Your Wort/ Transferring to Your Fermenter *Time to complete: 10 minutes*

11. Pour 2 gallons of distilled or filtered water into your fermenter. Carefully remove the hop bags from your wort and discard. Very carefully, pour your wort into the fermenter, mixing it with the water. Add more water to fill the fermenter up to the 5 gallon mark if necessary.
12. Using your sanitized thermometer, check the temperature of your wort. It must be below 80degF before you add your yeast. Further chilling of your wort may be necessary by placing the fermenter in a sink with ice water.
13. 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 down this number (between 1.030 and 1.100). Discard the sample wort, do not return to the fermenter.
14. Once your wort is below 80degF add yeast by tearing open the package and sprinkling it across the surface. Snap the lid tightly on the fermenter, and put the stopper in the hole in the lid. Fill the airlock  $\frac{1}{2}$  full with sanitizer solution and insert in the stopper. Once yeast is added, it is no longer called wort- it is now called beer. Put the fermenter in a dark, temperature-stable place like your basement or a closet.  
*(Please see your kit's **Beer Style Specifics** sheet for fermentation temperature and other instructions.)*

#### Monitoring Fermentation

15. Your beer is in the "lag phase" now and it will appear nothing is happening for 1 or 2 days. Don't worry! Soon your yeast will get started turning sugars into alcohol and CO<sub>2</sub>, plus other flavor and aroma compounds like esters, phenols and sulfur-based aromatics. Keep the lid on tight- resist the temptation to open and check it frequently.
16. Your beer will next go through "primary fermentation" characterized by rapid release of CO<sub>2</sub> and much foaming on the surface of the wort. This will last for about 3 days. Then comes "secondary fermentation" characterized by much slower release of CO<sub>2</sub> and a noticeable change to the appearance of your beer- it will begin to turn clear and the foam on top will be gone.

#### Your Finished Beer

17. After about 10-20 days your beer will 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 specific gravity with the sanitized hydrometer. 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 or malt extract and bottle it. Another is to transfer your beer into 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 Premium or Ultimate 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 to advance your hobby you should purchase one of the many good books on home brewing. You will learn many small tips and more complex procedures that will help you take your beer to even higher levels of greatness. Or just keep brewing great beer simply from Brewcraft Premium and Ultimate Beer Ingredient Kits!



## Bottling your Brewcraft Premium or Ultimate Beer

*Experience Outstanding Beer™ with Brewcraft!*

# BREW CRAFT USA

These instructions are a basic set of guidelines for bottling your fully fermented Brewcraft 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 | ✓ Bottle Brush*                               |
| ✓ Bottling/Transfer 6-gallon pail*            | ✓ Hand Capper*                                |
| ✓ No-rinse sanitizer *                        | ✓ Disposable food-handler's gloves (optional) |
| ✓ Racking Cane and Siphon Assembly*           | ✓ Plastic or glass bowl                       |
| ✓ Bottle Filler*                              | ✓ 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 the all your bottling steps* Bottling Date: \_\_\_/\_\_\_/\_\_\_\_\_

- |   |   |
|---|---|
| ___ Clean and Sanitize Equipment, Bottles, Caps | ___ Fill and Cap your Bottles                       |
| ___ Boil your Priming Sugar                     | ___ Rinse and Store your Bottles at Room Temp until |
| ___ Transfer (Rack) Beer to Bottling Pail       | ___/___/_____ 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 out 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: 30 minutes, approximately*

4. Pour about 1 qt of your sanitizer solution into a bowl; discard the rest. 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: 45 minutes, approximately*

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, and Happy Brewing and Drinking!* All contents copyright of Brewcraft USA, 2010