



German Ale

Brewing Instructions

1. Remove the **Liquid Yeast Pack** (#1) and start, by breaking the inner seal. Shake to mix and let sit at room temperature for 1 to 7 days (usually 1 to 3 days) until the package swells to at least $1\frac{1}{2}$ " thick. Once the package swells, it must be used within 3 days. **CAUTION** - Never use a package that does not swell to at least $1\frac{1}{2}$ " thick! Check williamsbrewing.com for warranty replacement, or call 800-770-0620.

2. Prepare the wort (unfermented beer). Boil 5 gallons of water in a 7.5 gallon or larger pot and cut open the **Malt Pouch** (the heavy unlabeled pack of syrup). Squeeze the malt syrup into the water, and stir until all the malt traces are dissolved from your spoon. It is a good idea to turn off the heat when the malt is stirred in, to prevent the malt syrup from scorching on the pot bottom.

3. Boil for 1 hour. Watch for boil overs, which are very likely when the pot first comes to a boil after adding the malt. Boil overs can be stopped by turning off the heat and stirring. Add the Flavoring Hops **KCH112** after 5 minutes of boiling, and the **KCH075** (aromatic hops) after 55 minutes, 5 minutes before the end of the one hour boil.

4. After the 1 hour boil, let the hot wort cool in the covered pot until it drops below 85° F. Cooling generally takes 5 to 12 hours, and can be reduced to one hour or less (recommended) by placing the covered boiling pot in a cold water bath.

5. When cool, pour the wort into your sanitized fermenter, taking care to leave some of the silty brown 'trub' sediment behind in the pot. It is impossible to remove all the trub from the wort, because it is so silty. Removing some trub will result in a cleaner fermentation. It is not critical if you leave most of the trub in the pot, so just do

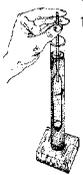
the best you can and try to leave some behind. After adding the wort to the fermenter, add cold water if needed to make 5 gallons.

6. Shake the swollen yeast pack and cut open the top with scissors, pouring the yeast into the wort. Snap on the fermenter lid and fill the airlock $\frac{1}{3}$ with water to seal.

7. In one to three days at room temperature (not below 60° F, ideally 65° to 72° F.) fermentation will begin, as evidenced by a foamy head rising on the surface of the beer. Let the beer sit sealed for a total of 16 days after adding the yeast to allow fermentation to finish before checking with a hydrometer. This is important to prevent bottling beer that is still fermenting, which can lead to exploding bottles.



8. Sixteen days after the start of fermentation, open and check beer with a hydrometer to be sure the finishing gravity of 1.022 or less has been reached (finishing gravities vary from batch to batch, and yours may be a bit higher or lower). If the gravity is above 1.022, stir beer gently with a sanitized spoon, reseal, and wait more days before rechecking.



9. When the finishing gravity has been reached and the beer has been in the fermenter for 16 days*, sanitize your Priming Tank and beer bottles or kegs (48 twelve ounce or equivalent needed). Transfer your beer from your Siphonless to your Priming Tank with the included tubing (avoid splashing). If you plan to bottle, *stir in the entire pack* of included **Priming Sugar** into the beer in the Priming Tank at this time. If you plan to keg your beer, *stir in only $\frac{1}{2}$ cup* of the included priming sugar to the beer and discard the rest.

Once the fermented beer has been transferred into the Priming Tank, and the Priming Sugar has been thoroughly stirred in, it is time to bottle or keg. If bottling, fill each bottle to within an inch of its neck and cap. If kegging, fill each keg to 1 to 2" of its top and seal. Store at 65-70° F. for 7 days (both bottles and/or kegs) after sealing to allow the carbonation a chance to build.

10. For a traditional flavor, age in a dark area at 68° F minimum (ideally 70° F.) for the first 9 days to build carbonation, and then at a cooler 55° to 65° F. for 2 weeks before refrigerating and drinking. If beer is too cold during the first 9 days after capping, carbonation will not develop, so it is important to keep it at at least 68° F. for the first 9 days.



* Beer should be bottled as soon as possible after it has been in the fermenter for a total of 16 days. If it is inconvenient to bottle 16 days after the start of fermentation, you can wait an additional 4 days. Waiting longer, unless you transfer the beer to a secondary fermenter, can cause the beer to become tainted with yeast flavors.

Common Questions

Question: I added the yeast 5 days ago and I don't see any bubbles in the airlock. Has the ferment started?

Answer: It is best not to rely on the airlock as an indicator of fermentation. Remove the airlock and stopper from the Siphonless Fermenter and peer inside at the inner walls of the fermenter - if there is a brown or green yeasty ring about an inch up from the beer level, the ferment has started, and your lid has an air leak in the seal (not serious).

Question: The airlock bubbled vigorously for 2 days and has now stopped. Has the ferment stopped?

Answer: This is normal. The peak of fermentation only lasts a day or two, and can be over in 1 to 2 days. After this point, it is often easier for the CO2 in the fermenter to push itself out the lid seal rather than lift up the water in the airlock. If you are concerned, take a gravity reading with a hydrometer; the gravity will be very close to, or at, the finishing gravity specified in step eight. The beer is not ready to bottle at this point, however, and should be left the full 16 days to settle out.

Question: My beer has been bottled for 9 days, but does not have enough carbonation. What can I do to encourage the yeast to produce more carbonation?

Answer: Our kits are normally carbonated on the low side, to let the flavor of the malt and hop dominate, but carbonation can be too low if the bottled beer was stored below 65° F. for the first 9 days, the critical period when the yeast needs warm temperatures to eat the priming sugar in the bottle. Try moving the beer to a warmer area, and shaking each bottle a bit to get the yeast back in solution. Wait 12 more days after doing this before rechecking the carbonation level.

Question: My beer is overcarbonated. What did I do wrong?

Answer: You probably bottled too soon. You need to wait the full 16 days and check the beer with a hydrometer to be sure a stable finishing gravity has been reached before bottling.

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