

WILLIAM'S® DOUBLE RYE IPA

YEAST EXPIRES ON:

This kit has perishable yeast. Check to make sure the above expiration date has not been reached. If expired, order another pack of yeast from williamsbrewing.com (item Y70) before proceeding. (The date stamped on the pack is the production date, not the expiration date).



1. Remove the **Liquid Yeast Pack** and start, by breaking the inner seal. Allow 24 to 72 hours to swell (this is hard to predict and will vary based on yeast age). **If the yeast does not swell within 4 days, do not make this kit!** Email service@williamsbrewing.com or call 800-759-6025 for warranty information.

2. Prepare the wort (unfermented beer). Boil 6 gallons of water (it will boil down to 5 gallons in an hour) and cut open the **Malt Pouch** (the heavy unlabeled bag of syrup). Squeeze the malt syrup into the water, and stir until all the malt traces are dissolved from your spoon. 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.

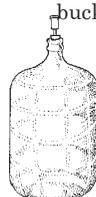
There are three hop (and one sugar) additions in the one hour boil. Add the **KCC150** (flavoring hops) after 5 minutes of boiling, and **KCS200** (second flavoring hops) and **KCS (beet sugar)** after 45 minutes, 15 minutes before the end of the one hour boil. After 55 minutes (5 minutes before the end of the boil), add the final **KCC100** (aromatic hops).

4. 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 30 minutes or less (highly recommended) by using a wort chiller.

5. When cool, transfer the wort (ideally via a valve on your brewing pot) into your fermenter. 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 65° F, ideally 68° 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 7 days in the primary fermenter after adding the yeast to allow fermentation to largely finish before transferring to a secondary fermenter (a 5 gallon carboy or another 6 gallon bucket sealed with an airlock).



8. After 7 days of primary fermentation, transfer to your secondary fermenter and seal with an airlock. Leave in the secondary for another 14 days at a minimum of 68°F, and then check with a hydrometer to be sure the finishing gravity of 1.015 or less has been reached (finishing gravities vary from batch to batch, and yours may be quite a bit lower). If the gravity is above 1.015, stir beer gently with a sanitized spoon, reseal, and wait 5 more days before rechecking. **Warning** - never bottle before the full secondary fermentation time of 14 days has been reached and the final gravity has been reached or exceeded, to prevent overcarbonation and burst bottles.



9. When the finishing gravity has been reached and the beer has been in your secondary fermenter for at least 14 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 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 $\frac{1}{2}$ " of its top hole, and seal.

10. This beer is best fresh. Drink as soon as it is carbonated, which is typically 7-9 days after it has been primed with sugar and capped. Make sure the beer keeps a steady temperature of at least 68° F. during the 9 days to allow the yeast a chance to eat the priming sugar and produce carbonation. After carbonation has occurred, refrigerate to preserve freshness.

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 14 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 bottled too soon. You need to wait the full 14 days in the secondary and check the beer with a hydrometer to be sure a stable finishing gravity has been reached before bottling.

William's Brewing

800-759-6025

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