How do I make a yeast starter?

Making a yeast starter is easy to do, and is highly recommended for higher gravity beers, meads, cysers, etc. You don’t actually need to do a yeast starter for lower gravity brews, but it certainly wouldn’t hurt anything if you did. You should also make a yeast starter if you are doing large batches of 10 gallons or more. Whatever your need for making a yeast starter, the process will be pretty much the same.

Here is a checklist of everything you will need to make a yeast starter:

1. 1000ml Drilled Stopper Airlock
2. Laboratory Flask for Flask
3. Dry Malt Extract OR *Midwest Yeast Starter Kit Yeast
4. *All the items needed (except for the yeast) are conveniently packaged in our yeast starter kit.

The first thing you should keep in mind is that a yeast starter should be made one to three days before you plan to brew. You’re going to want a healthy, bubbly fermentation going on in your starter before you pitch it into your cooled wort, and it’ll take a day or two for that to happen.

First, clean and sanitize anything that will be coming into contact with your wort: the flask, the stopper, and the airlock. One nice thing about using a laboratory flask is that you can put it directly on top of your gas or electric stove burner. Since you are doing the yeast starter all in the same container, you are far less likely to introduce any unwanted bacteria. The 1000ml flask is the right size for most homebrewers; we’ll get into larger starters in a bit.

To make a yeast starter, you need to make a “mini-batch” of brew, cider or mead. For any beer, you’ll want to use the plain light dry malt extract. You’ll be using 1/3-1/2 cup of dry malt extract and 16 oz. of water. If you’re making hard cider, you’ll want to use 16 oz. of cider to make your starter. If you are making mead, you’ll want to use 1 part
honey to 4 parts water ratio, 1/2 cup of honey to two cups of water, for example. Keep in mind for honey starters that you will need to add some yeast nutrient. Honey is devoid of minerals and nutrients critical to the fermentation process, so add a pinch of yeast nutrient during the pasteurization.

Once you have your mini-batch in the flask, you’ll need to pasteurize it by either raising the temperature to 185-195°F for at least 20 minutes (for meads and ciders) or boiling for 20 minutes (for beers). Remove it from the heat source and put a square of sanitized tin foil on top of the flask to keep any unwanted bacteria out. Once you’ve done this, you’ll need to cool the wort to below 70-75°F, just like you would for a batch of brew. With the laboratory flask it’s much easier, as you can do a quick ice bath in your sink and have it cooled to below 80°F in no time. You can use your dial thermometer to determine when you’re at pitching temperature.

After you have the mini-batch chilled down to 70-75°F, remove the foil top and pitch your yeast into the starter, and seal the container with a sanitized stopper and fermentation lock. After a couple of days, you will see a nice yeast cake develop on the bottom of the flask. This is what you’re looking for! The yeast have gone to work and multiplied so that you’ll have plenty to throw at all of the fermentable sugar in that high gravity brew.

On brew day, just pitch your yeast starter into your cooled wort like you would normally. You’ll notice that the beer will begin fermenting much quicker, and also a more vigorous fermentation. This is good! A yeast starter helps to ensure that your beer will ferment out as much as possible.

**Larger Starters**

For very high gravity brews such as an Imperial Stout or Barleywine, you may want to make a starter larger than this. The best way to achieve this is to first make a yeast starter as previously explained. Once you have an active fermentation going on, then you can “step up” the starter. Using the same ratios mentioned earlier, make another mini batch of wort. For example, if you are going to be stepping up to a one gallon jug, you’ll need 2/3-1 cup of dry malt extract and 32 oz. of water. Remember, you’ll still need to pasteurize this wort and cool it before you pitch the yeast into it.