Making a Yeast Starter

Liquid yeast packets should be stored in the refrigerator to keep the yeast dormant and healthy until they are ready to be used. There are two types of liquid yeast package - Those with inner nutrient packets and those without. The packages that contain an inner bubble of yeast nutrient (i.e. a "smack pack") are intended to function as a mini-starter, but are not always adequate. They still should be pitched (added) to the starter wort after activation. The package must be squeezed and warmed to 80°F at least two days before brewing. The packet will begin to swell as the yeast wake up and start consuming the nutrients. When the packet has fully swelled, it is time to pitch it to a starter to increase the total cell count to ensure a good fermentation. Vials of liquid yeast need to be warmed to room temperature for 3 or 4 hours, shaken well to mix and then pitched (added) to the starter wort.

A starter can be any volume of wort that you add yeast to before using it to make your beer. The yeast gets active in this smaller volume, usually for 1-2 days, and then can be added to 5 gallons of beer, or 10 gallons, or whatever size you’re brewing. This is a good way to proof the yeast; that is making sure it is viable. A starter should be used when brewing high gravity beers too. White Labs recommends on their label to make a starter "if the gravity is over 1.070, if the yeast is past its "best before" date, or if a faster start is desired."

Yeast type:

If using a slap-pack yeast, slap it and shake well two-days before you make your starter wort. If using a vial of liquid yeast warm it to room temperature for 3 or 4 hours, shake well and then add to your starter wort. If using dry yeast just add to your starter wort.

Making the yeast starter:

- Make up 1 pint of wort with a gravity of 1.040. Hop it as normal (if you like). Use 1/2 cup of Dry Malt Extract and add to one pint of boiling water. Boil for 15 minutes, cover and then cool to room temperature. You may cool it faster by immersing the covered pan in ice or ice water. Make sure not to splash any water into your starter wort.

- Sanitize a growler or other glass container and add the room temperature to it.

- Pitch (add) one vial of liquid yeast into the starter and shake the mixture well, airlock and let sit for 1-2 days.
Little to no activity will be seen in the starter since this is a very small volume of wort compared to the quantity of yeast. The yeast in the starter may be done within a couple of hours. But a layer of yeast should be at the bottom after 1-2 days. The wort on top of the yeast can be either decanted off the top, or left in and pitched with the whole volume. Most pitch the whole volume, but if the starter gets to the point of 2 liters for 5 gallons, then decanting the wort off of the yeast bed is recommended before adding to your 5 - 6 gallons of wort.

**Typical Starter Volumes for 5 gallons:**

- To activate the yeast: 1 pint
- To regenerate expired yeast (there will be living yeast in the package for 1 year): 2 pints
- To brew a high gravity beer: 2 pints
- To brew a lager beer with a starting fermentation of 50-55F: 4 pints

Good luck and Cheers!