

## Storing Yeasts & Starters

by Lord Simon Hondy OW, CDB.

Feb 2004

Yeasts and starters are living breathing flora and fauna, and thusly need to be taken care of. When we talk of yeast we are working with those jars, packets, pouches, tubes or containers of pure yeast grown specifically to make fermentation happen and usually purchased through a supplier or directly from the manufacturer. Starters are those items one creates at home, whether it be sourdough, barm, poolish, lump of dough, or simply skimming the top off your ale pot.

Moisture is the enemy when looking at storage. Ensure all containers seal tightly and allow minimal air space. Once moisture makes contact with the yeast, the yeast will begin to activate and lose its vigor. If you have a deep freeze, or access to one, use that instead. It is much colder than a refrigerator's freezer. That being said, don't despair, your refrigerator's freezer will keep the yeast cold and works very well. One thing to be aware of when freezing, and this was brought to my attention by Bear (Terry Decker), is that frost free freezers are constantly warming and freezing. This is not so bad for dry items, but does have an affect on frozen starters and compressed yeasts. Each time thawing them slightly and then refreezing them. This leads to a shortened life expectancy. It might be worth your while to take these items out and use up your compressed yeast or refresh your starters at least every three months.

### **“Over the Counter” Yeasts**

Dry yeast is probably the easiest of all to store and the freezer seems to be the best place for it. I tend to use several smaller containers rather than one large container when storing in the freezer, if one loses its vigor I use another, and the whole thing is not a loss. Also if you tend to drop things it is best to spill a few ounces of yeast all over rather than a whole pound of it. When I buy in bulk, I will reuse my old yeast jars after washing them very well in hot soapy water. Ensure they are completely dry before putting any yeasts back in them. To label the bottles, I like to use simple white address labels and either a permanent marking pen, or a crayon. I have found that labeling the jar while it is about room temperature keeps the label from peeling off so easily in the freezer. If you use the foil packets, they may be stored unopened in a cool dry place for long periods. Make sure to check the package's expiration date on them. Dry yeast can be put in the freezer for up to a year with no ill effects. Erring to the side of caution, I even put the packets zip lock bags or air tight containers so they won't get damp, keep out that moisture!

Quick chart for “over the counter” yeasts

Chart 1

|                       | Counter<br>(cool and dry) | Refrigerator | Chest or<br>Refrigerator Freezer | Frost Free Freezer |
|-----------------------|---------------------------|--------------|----------------------------------|--------------------|
| Dry Packaged<br>yeast | fair                      | fair         | best                             | best               |
| Jar Yeast             | fair                      | fair         | best                             | best               |
| Compressed<br>yeast   | never                     | good         | best                             | fair               |
| Liquid yeast          | never                     | best         | best                             | fair               |

I have never used compressed or “cake” yeast, but it too can be stored for long periods, although if one is using compressed yeast, I would think one is doing a lot of baking and using it up before it has a chance to lose its potency. *Compressed fresh yeast, which is quite perishable lasts only two to four weeks in the refrigerator, it can stay active for at least six months in the freezer although it will need defrosted before use.*<sup>1</sup>

I have toyed with the idea of baking with liquid or “pitchable” yeasts usually used for brewing or vintning. Storage is really along the same lines of compressed yeast. The manufacturers do not really cover freezing it, and the freezing information in Chart 1 is solely my own assumption for this type of yeast. I would lean more towards keeping it in the refrigerator, hopefully it won’t remain around long enough to need long term storage. If you will want to keep it on hand for a longer term treat it like the yeasts in the next section. As always, pay attention to manufacturer’s instructions and the expiration date on the container.

### Preferments

At this point we move to the homemade preferment, the starters. Things with interesting names like Biga, Levain, Poolish, Barm, Chef, Pâté Fermentée, extra dough and even good American Sourdough. Preferments range in constancy from runny pancake batter to firm bread dough. The starters that typically get stored for any length of time tend to be like barm or sourdough. A culture we refresh periodically to keep it healthy. The heavier denser preferments are generally a stage in the process, and tend not to be around for more than a day or two before becoming bread.

Quick chart for Preferments and “left-overs” Chart 2

|                   | Dried and frozen | Active | Chest or Refrigerator Freezer | Frost Free Freezer |
|-------------------|------------------|--------|-------------------------------|--------------------|
| Starter           | best             | fair   | best                          | good               |
| Ale barm          | best             | fair   | best                          | good               |
| Lees from brewing | best             | fair   | best                          | good               |
| Liquid yeast      | best             | fair   | best                          | good               |

For simplicity I am going to call all preferments that are kept alive through periodic feeding and refreshments “barm”. There are several ways to store barm. Once your barm is safely going, put it in the refrigerator, I use quart mason jars and close the lid tightly, leaving a good third of the jar free for air. I do this for my own feeling of safety, worrying that too much pressure might build up other wise. Once it is cold and relatively dormant, it can survive about a week or so. It is recommended get it out once a week and refresh it, or use some of it, refreshing it in the process.

Your freezer is another good way to store your barm. If you know you're going to be away for a time, you can freeze it. I will put it in doubled up freezer bags and squeeze all the remaining air out. Make sure you leave room to grow as it will expand as it freezes. Remember to watch it closer if you have a frost free freezer. When you are ready to use it again, give it a day to revive on the counter, refresh it as you would from the refrigerator, give it another day to rest and it will be ready to go to work.

You can also *dry your starter by spreading it out on a piece of heavy plastic wrap or waxed paper. Once it's dry, crumble it up and put it in an airtight container.*<sup>2</sup> This I will store in the same fashion as dry powered yeast.

When dealing with the more dough like preferments, they to can be refrigerated or frozen. Usually when they are in the refrigerator they are being retarded to slow the fermentation process, this is short term storage, usually no more than a day. Freezing is really the most likely long term storage. Much like barm, I put it in zip lock freezer bags, which I first drizzle a little oil into, then put the preferment into the bag and squeeze out all remaining air. Same precautions apply about the frost free freezers and leaving room for the bag to expand as the preferment freezes. When freezing preferments I try to get them out and make bread with them, refreshing them and keeping their legacy going especially if it has a really good flavor.

When preparing for a longer term storage make extra, I try to put aside and store about eight to sixteen ounces of preferments. Keep the units small, I have used clean ice cube trays to freeze the more fluid barm and roll the more dough like into walnut sized balls. Wrap them individually and freeze. Once frozen I pop them all into a labeled freezer bag to keep them from disappearing into all the little nooks and crannies in my freezer, trust me on this one.

“Left-overs” are things my friends bring me, lees, the sludge from the bottom of their brewing barrels or wonderful rich “Ale barm” foam from the tops of their Ale kegs. When I get these “leftovers” I try to it right away, if I am unable to get to it right away, then I go ahead and dry it for storage. Keeping it in liquid form is much like compressed yeast cakes, it really does not have much of a life span, and by the time I get it, it is getting pretty close to the end any way. I don’t really want to even bother with freezing it for the same reason, just dry it. I have dried lees and Ale barm I received from my local brewer. I follow the advice from a Civil war reenactor whom I had talked baking with, he suggested that I pour out thin layer onto a clean dinner plate and let it dry. He pointed out to me that this was a common way to dry the Ale barm for later use. Unfortunately I don’t have his name or documentation of that point. Once this first layer is dry, another thin layer can be poured over it. Keep repeating that until a thick layer was formed, probably a little more than a 16<sup>th</sup> of an inch. This dry yeast can be scraped off the plate, put in a sealed container and stored like dry yeast you buy from the store, of which it is a very close cousin. This way my brewer can be surprised at a later date with bread made from the lees or Ale barm given to me. Bear (Terry Decker) suggests tenting a cloth or wax paper over the plate to keep things from falling into it, and minimizes contamination by wild yeasts.

You can also dry your barm by spreading it out on a piece of waxed paper and covering it lightly with another layer of waxed paper. Once it's dry, crumble it up and put it in an airtight container. This I will store in the same fashion as dry powered yeast. It is an excellent way to save your sourdough in case you have that one special breed and are afraid of killing it. For example, a barm you bought on the Internet from Egypt or, as in my case, your Laurel has given you a starter from France and you don’t want to lose the entire colony because you forgot to care for it. Drying then storing it in an airtight container and freezing is an excellent long term solution to keeping it safe.

In closing, this is not intended to be an in depth paper on yeast storage but more along the lines of a simple guide, a “starter” if you will, about storing leavenings. Nor is it intended to detail how one should care for their jars of cultures fermenting away in the cold recesses of one’s refrigerator. The thing to keep in mind whether you are refrigerating, freezing, drying or just keeping your leavening in a cool place on a shelf, maintain it in a clean tightly sealed container with room for expansion. Sealed containers keep moisture from invading your dry yeasts and prevent cross contamination of your wet starters. Don’t forget to label them too, labeled items on shelves tend not to get thrown out because no one is sure what it might be, or how old it is.

- 1) *O Chef* “How to Store Yeast” 19 Feb. 2004. <http://www.ochef.com/280.htm>
- 2) Sands, Brinna B. *The King Arthur Flour 200<sup>th</sup> Anniversary Cookbook*. Woodstock, Vermont: Countryman Press, 1992. Pg 527.