

# How long is the fermentation process?

The time a beer takes to ferment will definitely vary depending on many factors: whether you're brewing an ale or a lager, what style you're brewing, the gravity of the brew, and the yeast you'll be using. The recipe you're using may have specific instructions on the time you should leave the beer in the primary and in the secondary. Here we'll provide you with some general guidelines. As always, the final decision will be up to you, the brewer.

## A note about ales vs. lagers

If you're new to the hobby, you may not know the differences between brewing ales and lagers. The information contained here will assume that you know what these differences are and what techniques are involved. If you need more information on brewing lagers, please click here.

#### Why fermentation time varies



The amount of time a beer needs to ferment depends on the style and type of beer being made. Ales and lagers will ferment at different rates, as will darker beers and beers with higher alcohol content. Keep in mind that these are just suggestions. You may find that you like your beer with a shorter or longer fermentation time. New brewers are typically excited to try their beer, which is why our ale kit directions all say to ferment the beer one week in the primary and one week in the secondary (or two weeks if only using single fermentation). The directions also suggest 4-6 weeks of bottle conditioning before drinking. The directions listed here are along the same timeline, but at Midwest, most of the brewers here would agree that it is a better practice to perform a long secondary fermentation as opposed to a long time conditioning in the bottle. This makes for a more consistent batch of beer, as it is all aging together at the same time. Here are some general fermentaion time suggestions by style.

## **Light Ales**

For a style like a Liberty Cream Ale, Honey Bee Ale, or Aussie Light Ale, we would recommend one week in primary, and 1-2 weeks in secondary. The lighter flavor of these beers allows the beer to mature sooner because you are not waiting for the alcohol bitterness to subside, or for the beer to mellow out. You are basically just waiting for the beer to clear to your liking. So, once it is clear enough for you, feel free to bottle.

Light Ales: 1 week primary/1-2 weeks secondary

Liberty Cream Ale



## Some Light Ales to try:





Aussie Light Ale

# **Amber Ales**

For styles such as Autumn Amber Ale, Excelsior Altbier or Octane I.P.A., we recommend 1 week in the primary and 2-3 weeks in the secondary. As a beer gets darker in color it becomes more important to let the beer sit longer in the fermenter. The reason is due to the darker grains. The more a grain gets roasted, the more chances there are for off-flavors. This little extra time will make a big difference on how the beer tastes in the end. For an amber or red ale, we would recommend one week in primary, and 2-3 weeks in secondary. Even if the beer has cleared, don't worry, the carboy is an excellent place to store your beer until the flavors have blended better.

Some Amber Ales to try:

Amber Ales: 1 week primary/2-3 weeks secondary





**Excelsior Altbier** 

Octane I.P.A.

#### **Dark Ales**

Dark styles of beer will benefit the most from a long fermentation time. Your Irish Stout, Honey Porter, and Hex Nut Brown Ale will turn out even better with some extra aging time. Dark ales tend to contain some very heavily roasted grains. If not allowed to age properly, you may notice a slight "burnt" flavor in a dark ale. The longer you leave a dark ale in the secondary, the more of this sediment will completely settle to the bottom of your fermenter and not adversely affect the flavor of your beer. Again, you want one week in primary, and then 3-4 weeks in secondary. Dark Ales: 1 week primary/3-4 weeks secondary

## Some Dark Ales to try:



Irish Stout

**Honey Porter** 

Hex Nut Brown Ale

# You can never have too many carboys!

The one thing we suggest to every homebrewer who is looking to expand their brewery is CARBOYS! There are many reasons why:

- Capacity: The more carboys you have, the more batches you can have going at the same time.
- Variety: If you only have one carboy, you might not want to dedicate it for a year so that you can make an Imperial Stout or a Barleywine.
- Better beer: A long secondary fermentation does any beer a lot of good-better color, flavor and clarity.



**5 Gallon Glass Carboy** (secondary fermenter)



6.5 Gallon Glass Carboy (primary fermenter)

# **Light Lagers**

Lagers ferment differently than ales, and sometimes require special equipment. For more information on brewing lagers, click here. The main difference is that lagers ferment a good deal colder than ales do. While ales are quite comfortable bubbling away at room temperature, lagers are at home fermenting in the 45°-55°F range. The colder temperature greatly slows the fermentation process, so extra time is required both in the primary for the beer to fully ferment, and in the secondary for maximum clarity. For lighter lagers such as European Pilsner, This Bud's for You or Pilsner Urquell, Midwest suggests 1-2 months in the primary, and 1-2 months in the secondary. Most of the brewers at Midwest will keep a light lager in the secondary for at least 2 months.

Light Lagers: 1-2 months primary/2 months secondary



# Some Light Lagers to try:



#### **Pilsner Urquell**

#### Amber Lagers

Amber lagers such as Rich German Bock, Oktoberfest Lager or Midwest Red Lager take just a little bit longer to ferment than light lagers. It takes just slightly longer for the flavors to blend and mellow. It's not unusual for an amber lager to take 2 months to ferment out in the primary, then spend an additional 3-4 months in the secondary. Take Oktoberfest Lager for example. Traditionally, this style is brewed in May and tapped (or bottled) in late September or early October, or roughly six months. Some extra time in the secondary will go a long way toward improving the quality of an amber lager.

This Bud's For You

Amber Lagers: 2 months primary/3-4 months secondary



**European Pilsner** 

**Rich German Bock** 

# Some Amber Lagers to try:



**Oktoberfest Lager** 



Midwest Red Lager

## **Dark Lagers**

Most (but not all) dark lagers are higher in alcohol. Most of the medium gravity recipe kits sold by Midwest contain 6 lbs. of malt extract. By comparison, some of the dark lagers contain upwards of 12 lbs! This will translate to a longer fermentation time, due to the amount of alcohol being produced. Alcohol itself has a very bitter taste, and it takes some time to mellow out. Extra aging time will really help these beers out. For styles such as Bavarian Doppelbock, Bohemian Dark Lager or Schwarzwald Black Lager, our recommendation is 2-3 months in primary, and 9 months in secondary. In some cases, you might even want to keep the beer in secondary longer. Don't worry; the beer will be just fine in the carboy for that period of time. Just make sure to check the airlock from time to time to make sure there is still water in it.

#### Dark Lagers: 2-3 months primary/9 months secondary

# Some Dark Lagers to try:



#### Bavarian Doppelbock

Bohemian Dark Lager

#### Schwarzwald Black Lager

#### **High Alcohol Brews**

If you're brewing a beer that is above 7% alcohol, plan on not being able to drink it for up to a year or more. Some styles may even require several years in the secondary before they are ready to drink. As we've mentioned several times, a long secondary fermentation will greatly improve the flavor, especially for higher gravity brews like Imperial Stout, Superior Strong Ale and Bigfoot's Barleywine. For higher gravity ales, plan on 2 weeks in the primary and 9-12+ months in the secondary. For higher gravity lagers, plan on 2-3 months in the primary and 9-12+ months in the secondary. If you find yourself getting impatient to try one of your beers that's been sitting in the secondary for quite a while, taste a sample when you do a hydrometer reading; if you like the flavor, go ahead and bottle it.

## Some High Alcohol Brews to try:



Imperial Stout

**Superior Strong Ale** 

#### **Bigfoot's Barleywine**

#### Here's a chart with all of the guidelines we've covered here:

	Ale	Lager
Light	1 week primary	1-2 months primary
	1-2 weeks secondary	2 months secondary
Amber	1 week primary	2 months primary
	2-3 weeks secondary	3-4 months secondary
Dark	1 week primary	2-3 months primary
	3-4 weeks secondary	9 months secondary
High	2 weeks primary	2-3 months primary
Alcohol	9-12+ months secondary	9-12+ months secondary