



ABCCORK PRESENTS

Preventing Stuck Fermentation

For success, the winemaking process depends on many things; most notably it depends on fermentation. If fermentation stops before all the available sugar in the wine has been converted to alcohol or CO₂ then you may experience 'stuck fermentation'. Stuck fermentation rarely occurs, is easily avoided and can be remedied. This article will discuss ways of preventing stuck fermentation, recognizing it and remedying it.

Sanitation is the key to preventing stuck fermentation. It is necessary to properly sanitize your equipment and work area, including your hands, before you start the fermentation process. In addition, it is important to use fresh yeast and the proper yeast for your wine. The yeast should be properly re-hydrated and nutrients should be added to the yeast before pitching it. The addition of yeast to the wine is what starts the fermentation process, so take extra care: re-hydrate and stir the yeast before pitching, and make sure there is little temperature differential between the yeast and the wine (5-7 degrees). Stir the yeast and wine mixture to aerate it properly. Keeping your starting specific gravity at a reasonable level (1.090 – 1.100 or lower), will also help to prevent stuck fermentation.

With that said it is important to discuss the major causes of stuck fermentation. These include un-sanitized equipment, using old and incorrect yeast, not re-hydrating the yeast, not adding yeast nutrient, too high of a specific gravity, and temperate shock: too high or too low fermentation temperatures. Also, too much CO₂ in your wine can cause stuck fermentation – don't forget to degas.

If you think you are experiencing stuck fermentation think about the following questions; what is the specific gravity of your wine? Do you have an airtight seal on your airlock? Are you fermenting your wine in a hot environment? Checking the specific gravity will give you a good idea of the fermenting progress. If your airlock is not airtight you may end up with too much gas. And, if you are fermenting your wine in a warmer environment it may just be that the wine is fermented before you think; yeast works faster in warmer temperatures. If you have considered these and decide that the fermentation is stuck, it is time to consider the remedies.

If you get stuck, start with the simplest things first: adjust the temperature of your wine. Warming your wine to 70-75C may re-start the fermentation. You can also try stirring the wine to get the yeast moving. You can add a yeast energizer at this point, but we don't recommend adding yeast nutrient: leftover nutrients can spoil the wine. If these steps do not work for the fermentation process you can try racking the wine to re-inoculate it with fresh yeast. This time take extra care with handling, preparing and pitching the yeast. If you do this we recommend using a killer strain of yeast that will get rid of the old yeast.

These common simple solutions tend to fix the problem, but sometimes more drastic steps are needed. We suggest making a yeast starter. This involves adding 1.5 – 2 teaspoons of yeast energizer to a gallon of the wine that has been pulled from the must. To this mixture add 1 packet of a killer strain of yeast. Mix well, loosely cover and place in a warm environment. After about 15- 20 minutes, or when you have a vigorous fermentation, you can add this mixture back to the original must. From here monitor the specific gravity and fermentation process.

Stuck fermentation is easy to avoid if you follow proper sanitation habits. Taking special care in re-hydrating and adding nutrients to your yeast can make a big difference. The best remedy for stuck fermentation is prevention!



ABCCORK
YOUR ONE STOP SHOPPING SOURCE SINCE 1972

www.abccork.com
London, Ontario N6N 1N7