

## Tips for Making Great ZINFANDEL

*Zinfandel is a lush, fruity grape that is adaptable to many terrioris, but is best in warm (but not too hot) climates with cool nights. Picked early, it has more acid and strawberry flavors; picked late and it can have a jammy, blackberry flavor and can sustain alcohol approaching 16 percent.*

*DNA typing has shown that the Italian grape, Primitivo, and Zinfandel are clones of the same grape. Primitivo is a superior grape, from a grower's standpoint, to Zinfandel. It also is made in a darker, spicier style than most American Zinfandels.*

*The EU recognized Zinfandel and Primitivo as synonymous in 1999. In 2007, the U.S. TTB listed both wines as approved grape varieties - but they are NOT synonymous. Zins must be labeled as Zins, and Primitivos must be labeled as Primitivos*

1. Of course, start with good fruit. We believe the Club Project fruit will be top notch Zinfandel from one of the best Zinfandel terrioris in the world, the Sierra Foothills.
2. Harvest brix should be between 24 and 25.5 degrees (see note 1).  
When you get this must home, immediately check the pH and the TA. The pH is likely to be a little high (3.60+) and acid low (perhaps .50 g/l or so). My advice is to carefully add tartaric acid in stages to bring the pH down to about 3.35 to 3.40
3. Consider adding pectic enzyme before fermentation to aid in color extraction (2.5 to 5.0 grams per 100 liters). Pectic enzyme also breaks down the must so that minimal pressing is required. (This is not an essential step, so don't worry if you skip it).
4. Once pH is determined, add SO<sub>2</sub> in the form of KMBS to a level of .5 molecular (see table). Don't over do it - too much SO<sub>2</sub> can interfere with malolactic fermentation later in the process.
5. Bring the must temperature to 65 - 70-deg for inoculation. Pasteur Red, BM 45, PDM or D-254 are good yeast choices.

6. The use of nutrients is a good idea, since California fruit can be short on nitrogen. GoFerm is an excellent commercial nutrient which is mixed with the yeast during pitching. Be sure to follow the directions carefully. Other excellent commercial nutrients are Superfood and FermaidK; these are applied to the must during fermentation. A generic nutrient, DAP (Diammonium Phosphate) is widely used in the fermentation of commercial red wines. Proper use of nutrients can reduce the possibility of forming Volatile Acids (VA) during fermentation.
7. Try to keep the temperature below 80-deg during fermentation. If you're fermenting in an uncontrolled space, have some milk cartons of ice standing by. Primary fermentation will probably take 4 to 6 days. Be sure to punch the must cap down at least twice a day - more often if you can. Fermentation is an aerobic process, so fold in as much air as possible and agitate the must when punching down! Ferment the must to dryness - that is, until you get a negative reading on the hydrometer.
8. Malolactic Fermentation (MLF) is a bacterial transformation which contributes complexity and a nice mouth feel to the wine, so I recommend it for any red wine. I like Enoferm Alpha: Lallemend recommends inoculation when brix is 0-deg, pH is 3.2 or greater, must temperature is 62 to 77-deg and sulfites are 10ppm or less. Just as in primary fermentation, MLF requires nutrients; use Micro Essentials Oenos, which is formulated specifically for oenococcus oeni. MLF can take anywhere from 10-days to three months to complete. I pronounce MLF complete when it's indicated as such on a paper chromatograph and the wine has experienced a leap in pH of .15 to .20. If you have adjusted the must to a pH of 3.35 to 3.40, as recommended earlier, this will put your wine in the 3.50's - which is a nice place to be.
9. Press the wine at dryness, even though MLF is still in progress. Don't be too aggressive in pressing; the free-run and gently pressed wine is the best! Be sure to store the pressed wine in containers equipped with breathable stoppers, since MLF liberates small amounts of CO<sub>2</sub>.

10. For a fruity wine, rack it off the lees within 10 to 14 days after pressing. This also clears the wine from the gross lees, which could otherwise have an unsanitary and unwanted effect on the wine. Rack it a second time in January, and again in late spring. Keep your containers topped up, and keep SO<sub>2</sub> levels at 25 to 35ppm.
11. It is highly desirable to COLD STABILIZE this wine, particularly if you have added tartaric acid: Watch for a cold stretch this winter and put your wine outside for as many nights as you can. Potassium bitartrate crystals should form, which you can rack off. FYI: Wine typically freezes at about 24-deg.
12. Zinfandel is a great candidate for OAK. Whether it's in the barrel or with chips or cubes, this wine benefits from the light vanilla flavor provided by oak. American oak is preferred for Zinfandel.
13. After six or eight months, if the wine could use some additional structure/acid/fruit, it's time for your *Ace in the Hole*: BLENDING. The traditional blending wine for Zinfandel is Petite Sirah. Make, beg or borrow some wine and bench test it with your Zinfandel to achieve the taste you're looking for.
14. Like any red cellared wine, Zinfandel should not be bottled before 18-months. However, the reality is that most home winemakers need their containers freed up after about a year in order to accommodate the new harvest. In this case, bottle it when necessary; consume it when it tastes just right! Bring the SO<sub>2</sub> up to 35ppm or so before bottling. If you've racked the wine sufficiently, filtering a red wine should not necessary.

Note 1. If the fruit is harvested at a high brix in order to achieve bold flavors, it may be necessary to rehydrate the grapes to a lower brix for fermentation. Proceed as follows:

Add chlorine-free water according to the following formula:

$$\frac{(\text{Gallons of Must}) \times (\text{Brix of Must})}{(\text{Desired Brix})} \quad \text{equals} \quad \text{Volume of Must AFTER Hydration}$$

Subtract the volume of must you are starting out with from the volume of must AFTER rehydration (the answer to the above equation), to get the amount of water you will add to get the desired Brix level. Example: 60-gal of must at 30-deg brix; desire 26-deg brix

$$\frac{60 \times 30}{26} = 69.23 \quad 69.23 - 60.00 = 9.23\text{-gal of water to be added}$$

Courtesy: D.D. Smith